A TREATISE OF JAPANING AND VARNISHING

Being a compleat Discovery of those Arts.

With

The best way of making all sorts of VARNISH for JAPAN, WOOD, PRINTS, or PICTURES.

The Method of GUILDING, BURNISHING, and LACKERING,

with the Art of Guilding, Separating, and Refining METALS;

and of Painting MEZZO-TINTO - PRINTS.

Also Rules for Counterfeiting TORTOISE-SHELL, and MARBLE, and for Staining or Dying WOOD, IVORY, and HORN.

Together with Above an Hundred distinct Patterns for JAPAN-work, in Imitation of the INDIANS, for TABLES, STANDS, FRAMES, CABINETS, BOXES, &c.

Curiously Engraven on 24 large Copper-Plates.

By JOHN STALKER.

OXFORD,

Printed for, and sold by the Author, living at the Golden Ball in James's Market, London, in the Year MDCLXXXVIII.
A TREATISE
OF
JAPAN
IN
A R M I S T I C E
THIRTEENTH SERIES.

The

Treaty

Signed

at

Tokyo,

on

February

11,

1860,

the

13th

day

of

the

first

year

of

Meiji,

between

the

Empire

of

Japan

and

the

Government

of

the

United

States

of

America.

This

Treaty

is

entered

for

record

in

the

Department

of

State

of

the

United

States

of

America,

where

it

is

open

for

inspection

and

may

be

removed

to

any

place

in

the

United

States

for

the

benefit

of

the

people

of

the

United

States.

T he

people

of

the

United

States

agree

to

recognize

the

independence

of

Japan

and

her

right

to

control

her

own

affairs,

and

to

respect

her

territory

and

institutions.

The

people

of

the

United

States

agree

to

pay

Japan

such

sums

of

money

as

may

be

agreed

upon,

and

to

grant

Japan

such

favors

as

may

be

agreed

upon.

The

people

of

the

United

States

agree

to

acknowledge

Japan

as

an

independent

nation,

and

to

recognize

the

sovereignty

of

Japan

over

her

own

affairs.

The

people

of

the

United

States

agree

to

grant

Japan

such

favors

as

may

be

agreed

upon.

The

people

of

the

United

States

agree

to

acknowledge

Japan

as

an

independent

nation,

and

to

recognize

the

sovereignty

of

Japan

over

her

own

affairs.

The

people

of

the

United

States

agree

to

grant

Japan

such

favors

as

may

be

agreed

upon.

The

people

of

the

United

States

agree

to

acknowledge

Japan

as

an

independent

nation,

and

to

recognize

the

sovereignty

of

Japan

over

her

own

affairs.

The

people

of

the

United

States

agree

to

grant

Japan

such

favors

as

may

be

agreed

upon.

The

people

of

the

United

States

agree

to

acknowledge

Japan

as

an

independent

nation,

and

to

recognize

the

sovereignty

of

Japan

over

her

own

affairs.

The

people

of

the

United

States

agree

to

grant

Japan

such

favors

as

may

be

agreed

upon.

The

people

of

the

United

States

agree

to

acknowledge

Japan

as

an

independent

nation,

and

to

recognize

the

sovereignty

of

Japan

over

her

own

affairs.

The

people

of

the

United

States

agree

to

grant

Japan

such

favors

as

may

be

agreed

upon.

The

people

of

the

United

States

agree

to

acknowledge

Japan

as

an

independent

nation,

and

to

recognize

the

sovereignty

of

Japan

over

her

own

affairs.

The

people

of

the

United

States

agree

to

grant

Japan

such

favors

as

may

be

agreed

upon.

The

people

of

the

United

States

agree

to

acknowledge

Japan

as

an

independent

nation,

and

to

recognize

the

sovereignty

of

Japan

over

her

own

affairs.

The

people

of

the

United

States

agree

to

grant

Japan

such

favors

as

may

be

agreed

upon.

The

people

of

the

United

States

agree

to

acknowledge

Japan

as

an

independent

nation,

and

to

recognize

the

sovereignty

of

Japan

over

her

own

affairs.

The

people

of

the

United

States

agree

to

grant

Japan

such

favors

as

may

be

agreed

upon.

The

people

of

the

United

States

agree

to

acknowledge

Japan

as

an

independent

nation,

and

to

recognize

the

sovereignty

of

Japan

over

her

own

affairs.

The

people

of

the

United

States

agree

to

grant

Japan

such

favors

as

may

be

agreed

upon.

The

people

of

the

United

States

agree

to

acknowledge

Japan

as

an

independent

nation,

and

to

recognize

the

sovereignty

of

Japan

over

her

own

affairs.

The

people

of

the

United

States

agree

to

grant

Japan

such

favors

as

may

be

agreed

upon.

The

people

of

the

United

States

agree

to

acknowledge

Japan

as

an

independent

nation,

and

to

recognize

the

sovereignty

of

Japan

over

her

own

affairs.

The

people

of

the

United

States

agree

to

grant

Japan

such

favors

as

may

be

agreed

upon.

The

people

of

the

United

States

agree

to

acknowledge

Japan

as

an

independent

nation,

and

to

recognize

the

sovereignty

of

Japan

over

her

own

affairs.

The

people

of

the

United

States

agree

to

grant

Japan

such

favors

as

may

be

agreed

upon.

The

people

of

the

United

States

agree

to

acknowledge

Japan

as

an

independent

nation,
TO THE
RIIGHT HONOURABLE
And most ACCOMPLISH'D
Lady MARY JERMAN.

MADAM,

Though it may appear Presumptuous for so mean an Author, to Dedicate a Treatise that is so far from being Faultless, as this of mine is; to a Person of so High a Quality, and such an Exact Judgement as Your Ladiship: Yet those very Considerations that argue this Dedication to be Presumptuous, do at the same time justly it, because they prove it to be Necessary. (And I doubt not, but a Person of Your Ladiships Goodness, and Condescension, looks upon Necessity, as sufficient to justify an Action of this Nature; that might otherwise justly be reputed a Crime.) For the meaner the Author be, and the less perfect the Treatise, the greater necessity for a Powerful Protection, under the Shelter of an Eminent Patronage.

And how can such a Book as this, that has nothing to recommend it, but the usefulness, and truth of the Experiments it contains, be better secured, against the Censures of this our Critical Age we live in, than by the Patronage of a Lady, that is no less Eminent for her Quality, Beauty, and Virtue, than for her Incomparable Skill and Experience in the Arts that those Experiments belong to, as well as in several others: For I know Your Ladiships Candor, Exactness, and Judgment to be such, that if You find the matter of the Book to be useful, and to answer the test of Experience, You will easily overlook any Imperfections, that rigid Criticks, may Censuer in the manner of proposing it: All which Encourages me to hope for a Gracious Acceptance of this small present, which is offer'd to Your Ladiship with the greatest sincerity, and most profound respect, by

MADAM,

Your Ladiships most Humble,
and most Obedient Servant

JOHN STALKER.
THE PREFACE

To the Admirers of the Noble Arts of PAINTING,
JAPANNING, GUILDING, &C.

If the Antiquity of an Art can advance its credit and reputation; this of the Pencil may justly claim it; for although we cannot trace it from its Original, yet we find many valuable Pieces extant in time of Alexander the Great. The Grecians (who always encouraged Learning and Ingenuity) had so great an honour for this Art, that they ordained, That Gentlemen's Sons and Freedborn should be first sent to a Painting-School, to learn the way to Paint and Draw Pictures, before they were instructed in any other thing; Slaves and vulgar hands, by a perpetual Edict, were excluded from the benefit and practice of it: And lastly, it was enacted, That the Art itself should be ranked in the first degree of Liberal Sciences. After them the Romans entertain it with great respect and veneration; and the Jews, though denied this Profession by their Law, were not wholly destitute of Artificers; for St. Luke (if Tradition may be credited) was a Painter, as well as Evangelist and Physician, and for that reason we honour and respect him as our Patron and Protector.

The Civilized of all Ages have given it a kind and most obliging reception: Candaules King of Lydia purchased a Table, whereon the Battel of Magnes was painted with excellent skill, for its weight in Gold; and King Demetrius forbore taking the City of Rhodes, left in the fire and plunder of his Southerns he should have lost a Picture, which he prized beyond the Conquest of the Town. Indeed, they are so highly valued by us; that we think them ornaments for our Churches and Altars. The Hollanders reckon their Estates and Worth by their pieces of Painting; and Pictures with them are ready and current money: in these too they discover their ingenuity, for you shall rarely meet with a Dutch-joke, but in Picture. Some Femals have also been well pleased with this Art, which they imagine can heighten and preserve their beauties; Jezebels, who prefer Art to Nature, and a fordid Ficus to a native complexion; and this too familiar to meet with these walking Pictures, that unless we are very circumspect, we may be imposed upon with Ixion's fallacy, who embraced a Painted vapour for a Goddes.

Painting will certainly make us survive our selves, and render the shadow more lasting than the substance, when the colours are laid in the right place, and by the Painters hand.

Begging the Muses' pardon, I should prefer a Picture to a Poem; for the latter is narrow and short-lived, calculated to the Meridian of two or three Countries, and perhaps as many Ages; but Painting is drawn in a character intelligible to all Mankind, and stands not in need of a Gloss, or Commentator, 'tis an unchangeable and uni-
universal language. Painting can decipher those mystical characters of our Faces, which carry in them the Motto's of our Souls, whereby our very Natures are made legible. This comely part is the Limners more peculiar Province; and if the beauty and proportion of it can excite our love and admiration, what regard and esteem must we reserve for him, who can so excellently describe both. The Rarities of this Art were never yet so common, as to make them despicable; for the world very seldom produced above one famous Artian at a time; this Age brought forth a Zeuxis, that an Apelles, and the third an Angelo, as if a particular sprightly Genius was required, and they were to rise from the Phænix-ashes of each other, or that Men were to be born Painters as well as Poets.

If we duly weigh the merits of the Pencil, we shall find the deference and respect which our Predecessors paid to the Masters of it, was most just and reasonable; and that we our selves ought not to be wanting in gratitude and address. By the Painters assistance, we enjoy our absent friends, and behold our deceased Ancestors face to face: He it is, that stretches out our Eighty to eight Hundred years, and equals our Age to that of our Forefathers. The Egyptian Pyramids and embalming Spices of Arabia, were not sufficient to rescue the Carcasses from corruption or decay; and 'twas a grand mistake, to suppose the Ashes of one body could be preferred by the duff of another: Painting only is able to keep us in our Youth and perfection; That Magick Art, more powerful than Medea's charms, not only renews old age, but happily prevents grey hairs and wrinkles; and sometimes too, like Orpheus for Euridice, forces the shades to a surrender, and pleads exemption from the Grave. Mahomet is truly the Painter's Paradise, for he alone can oblige with a Mistress for ever young and blooming, and a perpetual Spring is no where to be found but in his Landskip. In fine, what were the Heathen Gods but fancies of the Painter, all their Deities were his handywork, and Jove himself stole his boasted Immortality from him.

Well then, as Painting has made an honourable provision for our Bodies, so Japanning has taught us a method, no way inferior to it, for the splendor and preservation of our Furniture and Houses. These Buildings, like our Bodies, continually tending to ruin and dissolution, are still in want of fresh supplies and reparations: On the one hand they are assaulted with unexpected mishances, on the other with the injuries of time and weather; but the Art of Japanning has made them almost impregnable against both: no damp air, no mouldring worm, or corroding time, can possibly deface it; and, which is much more wonderful, although its ingredients, the Gums, are in their own nature inflammable, yet this most vigorously resists the fire, and is it self found to be incombustible. True, genuine Japan, like the Salamander, lives in the flames, and flands unalterable, when the wood which was imprison'd in it, is utterly confumed. Juft so the Asbelton of the Ancients, the cloth in which
which they wrapped the dead bodies, lay unchanged and entire on the Funeral Pile, and preserved the body, when reduced to ashes, from being mixt with common, and undistinguifh'd dust. Not that this only strong and durable, but delightful and ornamental beyond expression: What can be more surprizing, than to have our Chambers overlaid with Varnish more glossy and reflecting than polished Marble? No amorous Nymph need entertain a Dialogue with her Glass, or Narciflus retire to a Fountain, to survey his charming countenance, when the whole house is one entire Speculum. To this we subjoin the Golden Draught, with which Japan is so exquisitely adorned, than which nothing can be more beautiful, more rich, or Majestick: Let not the Europeans any longer flatter themselves with the empty notions of having surpassed all the world beside in stately Palaces, costly Temples, and sumptuous Fabricks; Ancient and modern Rome must now give place: The glory of one Country, Japan alone, has exceeded in beauty and magnificence all the pride of the Vatican at this time, and the Pantheon heretofore; this last, as History informs us, was overlaid with pure Gold, and 'twas but proper and uniform to cloath the Gods and their Temples with the same metal. Is this so strange and remarkable? Japan can please you with a more noble prospect, not only whole Towns, but Cities too are there adorned with as rich a Covering; so bright and radiant are their Buildings, that when the Sun darts forth his luftre upon their Golden roofs, they enjoy a double day by the reflection of his beams. These delights would make us call to mind the fictions of the Poets, and perfwade us that the Golden Age was still in being, or that Midas his Wish had at length succeed. Surely this Province was Nature's Darling, and the Favourite of the Gods, for Jupiter has vouchfaff it a Visit, as formerly to Danae, in a Golden Shower.
The EPISTLE to the READER and PRACTITIONER.

WV
E have laid before you an Art very much admired by us, and all those who hold any commerce with the Inhabitants of JAPAN; but that I thank not being able to furnish those parts with work of this kind, the English and Frenchmen have endeavoured to imitate them; that by these means the Nobility and Gentry might be completely furnish'd with whole Suits of Japan-work, whereof otherwise they were forc'd to content themselves with perhaps a Screen, a Draining-box, or Drinking-bowl, or some odd thing that had not a fellow to answer it: but now you may be look'd with entire Furniture, Tables, Stands, Boxes, and Looking-glass-frames, of all make and design, or what fashion you please; and if done by able Hands, it may come so near the true Japan, in pieces of Black, and nature of Draught, that no one but an Artist should be able to distinguish 'em. 'Tis certain, that not only here, but in JAPAN too, there is a vast difference in work: we, our selves have seen some that has been brought from thence, as mean and ordinary in Draught, (though the ground-work may be pretty good,) as you can possibly imagine. As for our Undertakers in this kind, they are very numerous, and their works are different; some of them have more confidence than skill and ingenuity, and without modesty or a bluff impose upon the Gentry such Stuff and Traps, for Japan-work; that whether it is a greater scandal to the Name or Artificer, I cannot determine. Might we advise such foolish pretenders, their time would be better employ'd in dawling Whistles and Puppets for the Toy-Shops to please Children, than contriving Ornament for a Room of State. Twill certianly pleas'd to hear such Ignorants blame this our Publication of an Art, that was not under'hand by the world: its unknown, we confess, even to them, and they themselves will find upon examination, that we have discover'd more than they ever knew or dreamt of, and in spite of all their Bravado's, will be beholding to our Rules and Patterns. These Pages are so far from expos'ing our Art, that on the contrary it enhances and raises its esteem and value. These will aff' the Term 'distinguishing between good Work and Rubbish, between an ignorant Knife and an Artist, and put a step to all the cheats and confusions of those whistling, tepidant fellows, who pretend to teach young Ladies that Art, in which they themselves have need to be instructed, and to the disgrace of the Title work, and better themselves under the notion of Japaners, Painters, Guilders, &c. 

What we have delivered in this Treatise, we took not upon Trust or Hearsay; but by our own personal knowledge and experience do promise and swear, that if you punctually observe them, you must of necessity succeed well; and if any Gentlemens or Ladies, having met with disappointments in one of the Receipts, do question the truth and reality of them, they may for their satisfaction (if it pleas'd with their convenience,) see them tried by the Author, according to the very Rules set down; who is in this, and all other Commands, their most ready and most humble Servant.

In the Cuts or Patterns at the end of this Book, we have exactly imitated their Buildings, Towers and Steeples, Figures, Rocks, and the like, according to the Patterns which the best workmen among them have afford'd us on their Cabinets, Screens, Boxes, &c. Perhaps we have help'd them a little in their proportions, where they were tame or defunctive, and made them more pleasant, yet altogether as Antique. Had we industriously contriv'd a profession, or fandom'd them otherwise than they are; we should have wonder'd from our Design, which is only to imitate the true genuine Indian work, and perhaps in a great measure might puzzle and confound the unexperienced Practitioner.

We know nothing farther that wants an Apology or Explanation; but to these our Endeavours do subjoin our hearty Wishes for your happy Progress and Success, and Subscribe,

Tours.
ERRATA.

In the Preface, page 1, line 4, for in time, read, in the time. l. 20. for Magnetes, read, the Magnetes l. 25. for, better joke, read, better Dutch joke l.unl. tis unchangeable, read, for tis unchangeable.

In the Book, Page 5. line 26. for, silver, read, silver-dull. p. 7. l. 25. for Small, read Lake l. 45. for Sea-green, read fine Small, and for, Greens, read, Blews. p. 25. l. 32. for, Muller or, read Muller and p. 29. l. 47. for, Venice Turpentine, read, oyl of Turpentine. l.unl. for Turpentine, read, Turpentine-oyl p. 36. after line the 27. read CHAP. XIII. p. 60. l. 9. for, narrow, read, many p. 77. l. 10. for, brown-red. l. 16. after vermilion, read, or.
CONTENTS.

Of Japaning.  1  How to make a Mould of any Carved Frame, thereby to save the Work of it in English, &c.  3
A character of the best Spirits, Gums, Metals, &c.  2  Of placing Paint or Carved-work on Frames.  64
To make japan, or japaned.  8  Of Lockering.  65
To make japaned.  9  How to make common Lockery.  66
To make the left White Varnish.  10  Another sort of Lockery.  67
To make Varnish that shall finish your Draughts, or other 11  How to make the left of Lockery used by the Guilders.  68
Gold-work, or Colors from the mixture of Varnishing, and well give it a glossy 13  To make a Lockery that may be used without fire or 69
To secure your whole piece, both drought and ground-work, whereby it may endure polishing, and obtain a glossy all over like the Indian performances.  13  To make Lockery new like Burnifh gold.  64
General Rules to be diligently observed in all manner of 34  Of Gun-metal.  64
To varnifi Olive-wood.  45  How to prepare Gold.  65
To varnish Walnut, and all plain woods.  46  To gild Silver, Copper, Brass, or Princes metal by 67
How to varnish black Japan.  47  Another way to gild Silver, Brass, &c.  66
How to make Edinburgh's dye.  49  How to local or brighten the color of the Gold.  66
How to make Blue Japan.  50  To take off Gold from any Gold Plate, without doing any mischief to the one, or life to the other.  66
How to make Gun-metal.  53  To filter over Brass or Copper, as the Clock-makers do their Dial-plates.  66
How to make Red Japan.  54  To gild Iron, Brass, or Steel with leaf gold or silver.  67
How to make Oriental-color Japan.  56  How to refine Silver.  67
How to make the color-light Japan.  57  To separate Gold and Silver when incorporated.  67
How to的工作 of any japaned.  58  Directions to paint Mezzotinto Prints on Glass, or 68
How to varnish No. 1.  75  without Glass, and the colors therein used.  69
How to varnish Prints with white Varnish.  75  To employ any of the powdered colours fine.  71
How to varnish Prints with White Varnish.  76  Of Opal, and their power.  72
How to varnish Prints with white Varnish.  77  How to make the left Drying gyl.  72
How to varnish Prints with White Varnish.  78  A Drying of ordinary.  72
How to varnish Prints, Dye the same.  79  To make Varnishes for those prints or pictures in 81
How to varnish Prints with white Varnish.  79  Red, or to make Prints transparent.  81
How to varnish Prints.  80  How to lay Prints on Glass.  81
How to varnish Prints with White Varnish.  81  To lay prints either Grand or Mezzotinto's on glass, in such manner, that you may roll off all the Paper, and leave only the Picture behind.  82
How to varnish Prints.  82  To prepare prints without Glass in framing Frames.  83
How to varnish Prints.  83  Of the size of the Picture of the Prints, and those that paint them.  84
How to varnish Prints.  84  How to paint a Mezzotinto Landship on a glass, or other way.  85
How to varnish Prints.  85  How to paint Hour.  85
How to varnish Prints.  86  How to paint Drapery, or Garments.  86
How to varnish Prints.  87  How to paint changeful Drapery.  86
How to varnish Prints.  88  To paint several figures of Red Drapery, and drift of the sheet.  87
How to varnish Prints.  89  Another Red near the same.  87
How to varnish Prints.  90  Other Reds more ordinary without Glazing.  87
How to varnish Prints.  91  To paint the black Blen, and place with Ultramarine.  87
How to varnish Prints.  92  To mix and lay on Gold-fize.  88
How to varnish Prints.  93  Of the laying on the Gold, and the Tools required in, and for the buffet.  88
How to varnish Prints.  94  To cover in gyl, such things as are to be exposed to the Profuse gyl, and polish pictures that are not laid to the weather.  89
How to varnish Prints.  95  To prepare and gild Carved Frames in gyl, that are not to be exposed abroad.  90
Of Guidance.  96  To prepare with White Night gold, or silver.  90
Of the laying on the Gold, and the Tools required in, and for the buffet.  97
To cover in gyl, such things as are to be exposed to the Profuse gyl, and polish pictures that are not laid to the weather.  98
To prepare and gild Carved Frames in gyl, that are not to be exposed abroad.  99
Of Barnifhing.  100  To varnish those prints or pictures without painting.  99
To lay on gyl, and lay on Gold-fize.  100  To varnish with polish and polish them like Japan.  100
Of the laying on the Gold, and the Tools required in, and for the buffet.  101
To cover in gyl, such things as are to be exposed to the Profuse gyl, and polish pictures that are not laid to the weather.  102
To prepare and gild Carved Frames in gyl, that are not to be exposed abroad.  103
Of the laying on the Gold, and the Tools required in, and for the buffet.  104
To cover in gyl, such things as are to be exposed to the Profuse gyl, and polish pictures that are not laid to the weather.  105
To prepare and gild Carved Frames in gyl, that are not to be exposed abroad.  106
Of the laying on the Gold, and the Tools required in, and for the buffet.  107
To cover in gyl, such things as are to be exposed to the Profuse gyl, and polish pictures that are not laid to the weather.  108
To prepare and gild Carved Frames in gyl, that are not to be exposed abroad.  109
THE ART OF
JAPANNING, VARNISHING, &c.

Every Artist, who undertakes to treat of his Profession, before he enters on the work, must describe the Instruments and Materials with which it must be performed: and by observing this method, those persons who either for diversion or advantage design to be Masters of this Art, furnish themselves with all things necessary after the best manner; I shall lay a good foundation, and may proceed to practice with cheerfulness and success. And that no one may impose upon you in the Price or Goodness of your Drugs; that your Spirits be very strong, your Gums and Metals of the best; take this following account, as your only security against all counterfeit and imposition. But before I speak of these things which the Shops supply us with, I presume tis convenient to acquaint you with others, that conduce to the composition, mixture, and preservation of the Varnish, Colours, &c.

And 1. two Strainers are required, made of pretty fine Flannel or ordinary coarse Linnen, in shape like a Tunnel, or Sugar-loaf, or a Jelly-bag that women strain Jellies through: one is useful for straining your white Varnish, and the other for your Lace-varnish, and Lackers, when you make any.

2. You must have two Tin-tunnels; one to use with your Lace-varnish, and Lacker, and the other for your white varnish for the same use.

3. You must be furnished with several Glass bottles, and Vials of all kinds and great, according to the quantities of varnish you make or use; and also with Gally-pots of several sizes, to put your varnish in when you intend to varnish: and for your Blacks, with which other things must sometimes be mixed, Gally-pots are better than any other vessels to mix your blacks and hold your varnish, because they are deeper than Pottingers, and not so wide, so that the varnish doth not so soon thicken, for the Spirits in a deep Gally-pot do not so suddenly evaporate.

4. You should provide several sorts of varnishing-tools, or Pencils, according to the greatnes or finallnes of the thing you design to work. Your varnishing Pencils are soft, and made of Camels hair, and are of several prices, according to the bignes of them: the best that I know are sold in Blackamoor-street by Clare-market, but you may have them also at several Colour-Sellers in and about London, from six-pence to half a Crown or three shillings the Pencil.

5. You must procure Pencils to draw with, small and greater, Goose, little Goose, Duck, and Swallow-quills, according to your work.
work. The longest haired Pensels I esteem the best for this use; you may have them all at the places aforesaid.

6. You should get 200 of Mufe-shells, that you may have them always in readiness to mix your Metals or Colours in, as occasion shall serve; not that you need use the tenth part of them at once, but that you may not be to seek when you want; and for change, when your metals or colours, by frequent mixture, shall grow dirty, which will be, if you work in Gum-water, as I shall hereafter observe.

7. You should furnish yourself with Rufs funts, which are called Dutch-Rufnes, with which you must smooth your work before you varnish it; and as you lay your ground of Colour or Black, if any knob or roughness appear on your work, you must take a Ruff and rub it off; so must you do as oft as you find any roughness or grittiness upon your work, either in laying your Grounds, or varnishing it up. You may buy them at the Iron-mongers.

8. You must have Tripoly to polish your work after it is varnished, which must be scraped, or finely pounded and sifted. But of this I shall have occasion to speak more largely, when I come to give rules for varnishing; you may have it at the Iron-mongers.

9. You can be without store of Linnen-rags as well coarse as fine, with which you must polish and clear up your work, as shall be shewed hereafter.

10. You must have Sallet-oyl for clearing up your work, as shall be notified in its proper place. All these things every Practitioner ought to provide, as being necessary to his future performances.

CHAP. I.

A true Character of the best Spirits, Gums, Metals, &c.

To know a Strong Spirit.

To make Varnish you must have Spirit of Wine, which must be strong, or it will spoil the Varnish, and not dissolve your Gums, and consequently hinder your design; for the stronger your Spirits are, the better will the Varnish be; the Spirits only being to dissolve the Gums, in order to make them spread, or lie even upon the work. After it hath performed that work, the sooner they evaporate the better, and the higher the Spirits are drawn, the less flegm or watery parts are in them; and the less of watery parts are in the Varnish, the sooner it dries, and is fit for polishing, is more permanent, and will come to the greater and better gloss. But this is of little use now Varnish is so much used; for the Distillers have learned by practice and custom to make Spirits that just dissolve the gums, only it requires the longer drying: Yet these Spirits that are
The Art of Japanning, Varnishing, &c.

are commonly used will sometimes be too weak, either by neglect or dishonesty of the Distiller, who hath not sufficiently deglazed or drawn all the water from the spirituous parts. Therefore the best way to prove your Spirits, is to take some in a spoon, and put a little Gun-powder in it, and then set the Spirit on fire with a little paper or candle, as you do Brandy, and if it burn so long till it fire the Gunpowder before it go out, it is fit for use, and will dissolve your Guins. All pretenders to this Art know this way of trying Spirits, and the damage weak Spirits do the Varnish: but since my design is to inform the ignorant and learner, it is reasonable and necessary in this place to insert it.

To choose Gum Lac, called Seed-Lac.

The best Seed-Lac is that which is large-grained, bright, and clear, free from dust, sticks, and drofs. The Drugsters afford it at several rates, proportionable to its goodness, generally for 14, 16, 18d. the pound.

To choose Gum Sandrick.

The best Gum-Sandrick is the largest and whitest, or that which calls the least yellow. Let it be as free from dust or drofs as you can. The value of it is commonly 12 or 14d. the pound.

To choose Gum Anima.

The whitest, clearest, and most transparent is the best, and the price is sometimes 3s. 4d., or 3s. the pound, according to the goodness.

Venice-Turpentine.

The only directions that can be given for the choice of it are, that the clearest, finest, and whitest is the best; and is sold at 18 or 20d. the pound.

White Rosine.

The best white Rosine is white and clear, and purchased at 4d. or 6d. the pound.

Shell-Laac.

The best Shell-Laac is the most transparent, and thinnest, and that which (if melted with a candle) will draw out in the longest and finest hair (like melted wax) because the toughest. There are counterfeiters, which you must endeavour to discover by the aforementioned rule. The true may be procured at 18d. or 2s. the pound.

Bole Armmonish.

The best Bole Armmonish is as fine as red Oker, and of a deep dark, blackish-red colour, free from grittiness or gravel, and is commonly called French-Bole.

Gum Arabick.

The best is clear, transparent, and white; you may pick it yourself from the Drugsters, but then you must pay something more; the common rate is 12d. the pound.

B 2

Gum
The best Capall is the whitest, freest from drofs, and thick dark stuff that is incorporated with the Gum. It is of it self a thick whitish heavy Gum, and rarely without that dark and drofly mixture; but that which is clearest and freest from the said stuff is the best. The price is 12, 16, or 18d. the pound, according to the goodnes.

To choose Gum Elemni.

The best Gum Elemni is the hardest, whitest, and clearest, freest from drofs or dirt. It is brought over commonly in the bark or husk of a Tree; which you may take off as well as you can before you use it. The Shops can afford it at 4 or 5d. the ounce.

Resin.

The best is the clear, and transparent, and clarified. It may be had at 3d. the pound.

Isinglass.

The best Isinglass is that which is clearest, and whitest, freest from yellownes. It is, if good, worth 3 or 4d. the ounce; you may have it cheaper by the pound. The same may be observed by other things; for the greater quantity you buy at a time, the cheaper will your purchase be.

Gambogium.

The best is that of the brighteft yellow, and freest from drofs. Some of it is dirty, thick, and full of drofs: there is difference in the price according to the goodnes; the best is worth 6d. the ounce.

To choose Benjamin, or Benzoine.

The best is that of a bright reddish colour, very like to clarified Rosine, but never so fine, freest from drofs or filth. Tis as in goodnes, 4d, 6d, or 8d, the ounce.

Dragens Blood.

The best is the brighteft red, and freest from drofs. You may buy it in drops (as the Drugsters call it) which is the best. They are made up in a kind of leaf or husk: it is commonly 8d. sometimes 12d. the ounce, according to the goodnes.

I have here given you an account of those things and Gums you will have occasion for in Japanning and Varnishing, and are all to be bought at the Drugsters at or near the prizes I have specified; and may serve to inform you in some measure of the Gums, their excellencies and value, but time and practice will make greater discoveries. Indeed grains of Allowance must be made for their different prizes; for their rise and fall depends upon the plenty or scarcity of them, and varies according to the goodnes of the commodity. It is not necessary to furnish your self with all, or any part of these, but as you have occasion to make use of them: for of
some an ounce will serve you a great while, of others a pound will be used at one time; of which you will know more, as I shall have occasion to treat of them in their order. I shall now proceed to Metals, which I will also give you some account of; and first,

Of Brass-dust, which is commonly among the Artists called Gold-dust.

This cannot be made in England fit for use, though it hath often been attempted, but comes from beyond Sea, as the rest of the Metals do that are good. Germany is the place where the best of all forts is made. The best Brass-dust is that which is finest, and of the brightest and most gold-like colour; which you may best discern, by taking a little on your finger, and squeezing it along your finger with your thumb; and if it be good, it will look with a bright and rich lustre, if bad, it will appear of a dull clayish colour, and will never work lively and bright. Several sorts of this Metal are imported here from foreign parts; which differ vastly as to the coarnefs and fineness, and the different ways of working them; as for instance, the coarser sort will work well with Gold-fize, which will not with Gum-water; other differences will arise also, which are subject to the discoveries of practice and experience. From this difference of Metals proceeds that of the prizes; for some are worth 12 or 14s. the ounce, whilst that others amount to not above 4 or 5s. for the same quantity. But these are two extremes; the first very good, and the other altogether as vile and bad; for there is a middle sort between both, which is generally afforded, by those that buy of the Merchant, for 8 or 9s. the ounce, which will work well.

To choose Silver-dust.

Some have attempted to make Silver here in England, but none I ever saw comparable to that beyond Sea; for that enjoys a lively bright lustre like polished or new-coin'd Silver, (which you may find by squeezing it between your finger and thumb) whereas that which we make here is dull, dead, and heavy, and indeed is a fitter representation of a Colour than a Metal; and by comparison you may find, how the dimnes of the counterfeit is obscured by the dazzling lustre of the true. Its price is answerable to its goodnes and excellency, for its lowest rate is no less than 16s. the ounce. But I would not have the price fright any one so far, as to prefer cheaper before it, for is neither so useful nor pleasant in the work, and the belt will go farther than this proportionable to its price. Tis customary in Japan to use several sorts of Metals that are corrupted and adulterate, and they are dyed too in garments, flowers, houses, and the like, which makes the work look more beautiful and surprizing; these likewise are vended and sold for the aforesaid use, and are commonly called,

First, Green-gold,

Is a certain corrupted mettle, casting a kind of a dead greenish colour, and is commonly sold at 6s. the ounce.

Dirty
Is another kind of corrupted metal, which bears some resemblance to drooffy dirty Gold: it may be purchased at 6s. the ounce.

Of Coppers

There are three sorts, Natural, Artificial, and Adulterate.
The Natural is ground without mixture, well cleansed, and is of the true genuine colour of Copper, and is sold at 6 or 7s. the ounce.
The Artificial accordingly exceeds the Natural; it is more deep and red, but very clear, and its bright glittering colour shews how far it is possible for Art to exceed Nature. Tis very rarely procured, or sold under 10s. the ounce.
The Adulterate Copper is of a thick, heavy, metallicke colour, and is commonly used to work other metals on; as if that be laid for a Ground, you hatch or highten with bright gold, or other light metal; and sold at 6s. the ounce.

There is also used in Japan-work metals, commonly called Speckes, of divers sorts, as Gold, Silver, Copper, and many other colours; some finer than other, and worked according to the fancy of the Artift, either on Mouldings, the out or in-side of Boxes, Drawers, &c.

Of these, those that are used in the Indian work, are the Gold, Silver, and Copper, though, as aforesaid, every one may take their own fancy or humor in the use of them. They are made here in England very well, and are sold each of them much at a price, 9 or 6 shillings the ounce, according as they are in fineness. So that what I said concerning the rates of Gums, will hold good here also. That a glut or scarcity of these enhances or abates the price; but generally these are exposed to sale at the rates I have affixed to each of them. These are sold by great quantities by several Merchants in London; and in less, by as many. I shall only mention two, viz. a Gold-beater, at the hand and hammer in Long-acre; and another of the same trade, over against Mercers-Chappel in Cheap-side.

Having given you an account of Gums, and Metals, I shall briefly run over the Colours, which formerly our ignorant English and French Practitioners used to mix with their Japan-work, but improperly; for the true natural Japan-work, so called from the Island of that name, did so far surpass all the painting of Bantam, and the neighbouring places, in goodness of black and flatness of draught, that no fiddling pretender could match or imitate it; and the ignorant undertaker not being able to make his work look well and lively,
lively, inferts several colours as a file to set it off, when (unfortunate man) instead of art, fancy, and skill, he exposè a piece gay, quaint, gawdy, finical, and mean, the genuine product of ignorance and presumption; and an ornament of Bartholmeu, or Alehoufe, rather than a Palace or Exchange. The mistake of Bantam-work for Japan, arose from hence: all work of this kind was by a general name called Indian; by use they so far confounded all together, that none but the skilful could rightly distinguish. This must be allowed for the Bantam-work, that is very pretty, and some are more fond of it, and prefer it to the other, may the work is equally difficult with Japan: But if I must give you my opinion, my skill and fancy induce me to believe, that Japan is more rich, grave, and Majestic, and for that reason ought to be more highly esteemed. But fancy, like Proteus, putting on a thousand shapes, cannot, ought not, be confined; and those who are inclined to admire colours, may find safe and exact rules set down by way of information.

And first, some colours we call transparent; such as are those we lay upon Silver, Gold, or some light colour, and then they appear in their proper colours very beautiful and lively. Of these for your use is, first, Distilled Verdigrise, for a green; fine Lake for a red; fine Smalt, for a blew. To render these useful, you must observe the following method: having provided a Porphyry, or Marble stone, with a Muller, take what quantity of Verdigrise or Smalt you please, and with Nut-oyl, so much as will just moisten it fit to work, grind it upon your stone till it be as fine or finer than butter; then put them in shells, mixing them with Turpentine-oyl till they be thin enough for your use; lay these upon silver, gold, or any other light colour, and they will be transparent, and alter their lightnes or darkness according to the lightnes or darkness of the metals or colours you lay under them. The same may you do with Lake for a red, only instead of Nut-oyl, use Drying oyl to grind it in.

Other colours are used which have a body, and are laid on the black of your table or box, where you have designed any thing, as Flowers, Birds, &c. These are Vermilion for a red, White-lead for a white; some use Flake-white for a white, which is a purer white, and much better, but for ordinary work the other will do: if you make a bleu to lay upon your work, you must take Smalt, and mixing it with Gum Arabick-water put in what quantity of white-lead you please, to make it deeper or lighter, as your fancy shall direct: but you must put in white-lead, because your bleu will not otherwise have a body; so must you do with all colours that have not a body of themselves. Some use Roseett, fine Lake, and Sea-green, for a Purple, and other sorts of Reds and Greens: and indeed ways of working are very numerous, which being now out of fashion, I should to no purpose both trouble you, and tire my self, by increasing the number; those which I have mentioned are

abun-
abundantly sufficient, for any that design to have something befeide gawdy colours in their work. Twill be convenient here to insert a caution concerning these Colours; that they are all to be layed with Gum-water, except the transparent ones above-mentioned: and whosoever hath a mind to work, either in Gum-water, or Goldsize, shall hereafter receive sufficient Instructions for both.

According to my promise I have in full treated of Gums, Metals, and Colours; I shall now in full proceed to discover the methods that are used to make Varnishes.

CHAP. II.

How to make VARNISHES.

To make Seed-Lacx-Varnish.

Take one gallon of good Spirit, and put it in as wide-mouthed a bottle as you can procure; for when you shall afterwards strain your varnish, the Gums in a narrow-mouthed bottle may stick together, and clog the mouth, so that it will be no eafe task to separate or get them out. To your spirits add one pound and a half of the best Seed-lace; let it stand the space of 24 hours, or longer, for the Gum will be the better dissolved: observe to shake it very well, and often, to keep the Gums from clogging or caking together. When it hath flood its time, take another bottle of the same bignefs, or as many quart ones as will contain your varnish; and your strainer of flannel made as aforesaid in this book, fasten it to a tenter-hook against a wall, or some other place convenient for straining it, in such a posture, that the end of your strainer may almost touch the bottom of your Tin-tunnel, which is suppos'd to be fix'd in the mouth of your empty bottle, on purpose to receive your strained varnish. Then shake your varnish well together, and pour or decant into your strainer as much as conveniently it will hold, only be sure to leave room for your hand, with which you must squeeze out the varnish; and when the bag by so doing is almost drawn dry, repeat it, till your strainer being almost full of the dregs of the Gums, shall (the moisture being all pressed out) require to be discharged of them: which ifces or dregs are of no use, unless it be to burn, or fire your chimney. This operation must be continued, till all your varnish is after this manner strained; which done, commit it to your bottles close stop, and let it remain undisturbed for two or three days: then into another clean empty bottle pour off very gently the top of your varnish, so long as you perceive it to run very clear, and no longer; for as soon as you obferve it to come thick, and muddy, you must by all means desist: and again, give it time to reft and fettle, which 'twill do in a day or two; after which time you may attempt to draw off more of your fine varnish, and having so done you may lay
The Art of Varnishing, Shelling, &c.

lay it up, till your art and work shall call for its assistance. Tis certain, that upon any emergency or urgent occasion you may make varnish in less time than 24 hours, and use it immediately, but the other I recommend as the best and more commendable way: besides, the varnish which you have from the top of the bottles first pour'd off, is of extraordinary use to adorn your work, and render it glossy and beautiful. Some artists, through haft or inadvertency, scruple not to strain their varnish by fire or candle-light: but certainly day-light is much more proper, and less dangerous; for should your varnish through negligence or chance take fire, value that loss, but rather thank your stars that your self and work-house have escaped. Should I affirm, that the boiling the Lacker and Varnish by the fire, were prejudicial to the things themselves, I could easily make good the assertion; for they are as well and better made without that dangerous element, which if any after this caution will undertake, they may feelingly allure themselves that is able to spoil both the Experiment and Operator. On the other hand, no advantage or excellence can accrue either to Lacker or Varnish; especially when, as some of them do, tis boiled to so great a height, that this Aetna is forc'd to throw out its fiery eruptions, which for certain confume the admiring Empedocles, who expires a foolish and a negligent Martyr; and it would almost excite ones pitty, to fee a forward ingenious undertaker, perish thus in the beginning of his Enterprise; who might have justly promised to erect a noble and unimitable piece of Art, as a lasting monument of his fame and memory: but (unhappy man) his beginning and his end are of the same date; his hopes vanish, and his mishance shall be register'd in doggerel Ballad, or be frightfully represented in a Puppet-show, or on a Sign-post.

To make Shell-Shell-varnish.

Whosoever designs a neat, glossy piece of work, must banish this as unferviceable for, and inconsistent with, the rarities of our Art. But because is commonly used by those that employ themselves in varnishing ordinary woods, as Olive, Walnut, and the like; tis requisite that we give you directions for the composition of it, that if your convenience or fancy lead that way, you may be supplied with materials for the performance. Having therefore in readiness one gallion of the best Spirit, add to it one pound and a half of the best Shell-Lace. This mixture being well stirr'd and shaked together, should stand about twenty four hours before tis strained: You might have observed, that the former varnish had much sediment and dregs; this on the contrary has none, for it wholly dissolves, and is by consequence free from all dros or fæces; tis requisite however to strain it, that the sticks and straws, which often are in the Gum, may by this percolation be separated from the varnish. But although this admits of no sediment, and in this case differs from the aforementioned varnish, yet tis much inferior also to it in an-
other respect; That this will never be fine, clear, and transparent, and therefore 'twill be lost labour to endeavour, either by art or induftry, to make it so. This small advantage however doth arise, that you need not expect or tarry for the time of its perfection, for the same minute that made it, made it fit for use. This, as I hinted before, is a fit varnish for ordinary work that requires not a polish; for though it may be polished, and look well for the present, yet like a handsom Ladies beautiful face, it hath no security against the injuries of time; for but a few days will reduce it to its native mist and dulness. Your common Varnish-dawbers frequently use it, for its doubly advantageous to them: having a greater body than the Seed-Lace, less labour and varnish goes to the perfecting their work; which they carelessly flubber over, and if it looks tolerably bright till its fold, they matter not how dull it looks afterward, and lure only being designed, if they can compass that, farewell credit and admiration. Poor insufficient Pretenders, not able to make their work more apparent, or more lafting than their knavery! And 'tis pretty to think, that the same misty cloak will not cover the fraud and the imposter! that the first should be a foil to the second, and the dull foggy work serve only to set off the knavish Artift in his most lively colours! But to conclude, if with a pint of this varnish you mix two ounces or more of Venice-turpentine, it will harden well, and be a varnish good enough for the inside of Drawers, frames of Tables, Stain-pillars, frames of Chairs, Stools, or the like. Painters Lackier made also with this Varnish, and something a larger quantity of Turpentine put to it; serves very well for lackering of Coaches, Houses, Signs, or the like, and will gloss with very little heat, and, if occasion be, without.

To make the best White-varnish.

I would desire the Reader to obferve, that when any Drugs, Gums, or Spirits, are set down for the use and making of Varnish, Lackier, or the like, though we do not to every particular write the beft of fuch a fort, yet that you fhould understand our meaning to be fuch, when we do not particularly forbid the getting or buying of the beft; for its irkifon and tedious to every fingle drug to affix the word Beft: wherefore to avoid fo needless a repetition, I fhall forbear mentioning it above once, either at the beginning or end, as it fhall seem most neceffary. Befides, tis a very reasonable fupposition; for you must not expect to raife a Noble piece from drofs or rubbiff; to erect a Louvre or Efcurial with dirt or clay, nor from a common Log to frame a Mercury. But to return to our defign of White-varnish: Being furniflied with one pound of the whitift Gum Sandrick, one ounce of the whitift Gum Mallick, of the cleareft Venice-Turpentine three ounces, one ounce and a half of Gum-Cupal, of Gum-Elemni half an ounce, of Gum-Bezoïn or Benjamin the cleareft half an ounce, one ounce and half of the cleareft Gum Anime, and of white Rosine half an ounce. The Gums
The art of japanning, Varnishing, &c.

Guins thus separately and in their due quantities provided, each being the best and most excellent in its kind; I must advise you to observe carefully the following order in their mixture and dilution. Put the Capal and Rosine in a glass-vial, with half a pint of Spirits to dissolve them: for the same end to another glass, containing three quarters of a pint of Spirits, confine the Gum Anima, Benjamin, and Venice-Turpentine. The Gum Sandrick and Maftick should likewise enjoy the privilege of a distinct bottle, and in it a pint and half of Spirits, for their more effectual dilution; and lastly, the Gum Elemi by itself, content with one quarter of a pint of Spirits to dissolve it. This is not highly necessary to observe the quantities of Spirits so exactly: but this in general I advise, that all your Spirits exceed not three quarts. They must in this distinct manner be dissolved, the better to extract the whole virtue of each Gum, and prevent their clogging and caking together, which would much hinder their being quickly or thoroughly dissolved. I must not forget further to acquaint you, that the Gum Anima and Benjamin be very finely pounded and reduced to powder, before they are mixed with the Spirits; you may also bruise the Capal and Rosine, as for the rest, they may be used or put into the Spirit as you buy them, without any alteration. Having thus carefully mixed 'em, let them care for one another for two or three days, and make them dance or change places, by shaking very briskly each bottle or vial once in two hours for the first day; the remaining time shake them at your own convenience. Then take a bottle large and capacious enough to hold all the varnish you have made, and through the fine linen Strainer (of which in the beginning I train all your gums, mixt as aforefaid; but squeeze gently, and not with so close an hand as was required for your Seed-Lac); for by this easy percolation you prevent the sandy, hard, gritty stuff passing through into your varnish. Some never strain it, but with great diligence pour it off as long as will run clear from each bottle. But if I may be a competent judge, this is not so good a way or so convenient, for these reasons: You have not, first, so much varnish, neither can you pour it off so clear and fine as you may by straining. Again, your drags being left in, by frequent use will fill up your vessel, and the fresh Gums will mix with the old, and slacken the melting of them, all which our method disallows of, and keeps the bottles empty, and fit for the same repeated use, without these inconveniences. The varnish thus strained having stood three or four days, (the longer the better,) pour of gently as much as will come very clear, reserving the thick and muddy part at the bottom for ordinary uses; as mixing with other varnish for black work, or to gloss the inside of boxes, as we shall hereafter more fully discover.

To make a White- varnish much inferior to the former.

This is made out of two distinct Varnishes, the one Sandrick, the other of Maftick; of both which take the following account.

D 2  Having
Having provided three quarters of a pound of gum Sandrick, mix it with two quarts of Spirits, and having been well shaken, and stood for about two days, decant or strain it into another bottle, and reserve it for use. Take also of clean pickt Mallow the same proportion, to an equal quantity of Spirit with the former, and in every particular observe the rules for making the Sandrick, as to settling, shaking, decanting, and straining it.

Now when you design to varnish a print or any thing else with this varnish, your usual proportion for mixing them, is to add a double part of gum Mallow to a single part of gum Sandrick. As for instance: Suppose the work would take up or consume three quarters of a pint of varnish; then by the foregoing rule you must put half a pint of Mallow to a quarter of a pint of Sandrick-varnish, and so accordingly in a less or greater quantity. And we think it to make these varnishes severally, and so mix them, that we may have our varnish answer to our desires in softness or hardness. Now when you have bet by your work for two days, you may try its qualities, if, by pressing your warm finger on it, you leave your print behind you, tis a sign that it is too soft, and a wash or two of the Sandrick will harden it: if it not only fail your touch, but hath some streaks, flaws, or cracks, like scratches, sometimes more or less, you may be sure it is too hard, and it must be remedied by a wash or two of your Mallow-varnish. Some usually dissolve these gums together, and others mix them before hand, and by so doing are not certain how their varnish will succeed; for it often happens, that some parts of each gum are softer than others, and so the contrary. Should therefore a varnished piece prove too soft, or hard, this way cannot remedy it; for to wash it again with the same, is only a repetition of the former miscarriage. These things being premised, I need not infer which way will prove the most rational, certain, and satisfactory.

To make Varnish, that shall cure your Draught, whether Gold-work, or Colour, from the injuries of Varnishing, and will give it a gloss.

Before we come to the Varnish, tis requisite to acquaint you with the manner of preparing Turpentine, which is the chiefest ingredient. Take then of good Venice-turpentine as much as you please, incline it in a Pipkin that will hold double the quantity that you put in. Having prepared a fire that will never flame out, but burn gently and clearly, let your pot over it, but be cautious that it boil not over, thereby to prevent the firing your Turpentine and your Chimney. To this gentle boiling motion caus'd by the fire you must join another, and with a flick very often stir it, until you find it rendered fit for use; which you may discover, by dropping a little of it on the ground; for when tis cold, it will crumble to powder between your fingers, if it be sufficiently boiled; and when tis brought to this pass, nothing remains but that you let it cool, and preserve it for the following composition.

Your
Your Securing-varnish requires a quarter of a pint of the finest Seed-Lace-varnish, (which is always the top of it,) and one ounce of this boiled Turpentine finely powdered; they must be both fluxed up close prisoners in a double glass-vial or bottle, capacious enough to contain a double quantity; which being fluxed close, may be placed over a very gentle fire, that it may leisurely heat, whereby to forestall the danger of breaking the glasses, which it is certainly past when this exceeding hot; and in this condition keep it for some time, simpering, and simmering: then take it off, and give it vent by unstoppering; so done, return the stopple shaking it well, and place it on the fire again, never discontinuing the operation; but repeat the forcauld method, till such time as your Turpentine shall be so far dissolved, that the bigness of a large Pea shall only remain visible; for that being the drops, and indissoluble part, will not endure to be incorporated. Being arrived to this degree, remove your Varnish, afford it two days to cool and settle; and vouchsafe the clearer part fresh lodgings in a clean bottle, that may entertain and keep it for your future designs.

Now whatsoever you propose to be by this varnish secured, if convenience will allow, should be destined to a warm place, that it may dry the sooner; if you cannot admit of it, then give it the space of half an hour to dry between every walk; however it will glaze either way. Then take a Pencil, for great work large, and for the contrary, proportionable to your draught: with this Pencil dip it in the varnish, secure it, that is, pass it over, leaf by leaf, and sprig by sprig, not omitting to give your Rocks, Figures, &c., the like entertainment; but be sure above all, that your steady hand never trespass upon the least part of your black or ground-work. Having run over all your draught thus, three or four times, for often may spoil the colour of your metal, you may rest satisfied that your undertaking (whether of Gum-water, or Gold-viz) is armed against all injuries and Tarnish; and, if performed Artific-like, adds to the native lustre of the metals, with an artificial gloss more bright, durable, and surprizing.

To secare your whole piece, both Draught and Ground-work, whereby it may endure polishing, and obtain a Gloss all over, like some of the Indian performances.

Here also, as in the last, your patience must be desir'd, and before we open our Scenes, think it reasonable to give you a survey of those passages which must be transacted in the Tiring-room or Shop, before the Actors and Operators appear on the Stage. That necessary and serviceable friend, Venice-Turpentine, here also gives his attendance: who in the quantity of one pound, to three pints of water, takes up his lodging in a clean earthen, Pipkin, almost as large again as the Inhabitants. These Guests so disposed of, with their house of clay the Pipkin, place over a gentle fire, and by degrees warm them, till they being pleased with their habitation begin to simmer, and dance a little; then do you promote their pace...
time by stirring with a stick, (as in the last Chapter you were directed.) But if they finding the place too hot for them, should endeavour to escape by boiling over, which you'll soon discover by the rout and bubble, and rising of the water; release them, not from the Vessels but fix the Pipkin in a cooler place; yet so, that they may always dance, and boil leisurely. If you find that a little of this Liquor being pour'd on the ground, if cold, is willing by your fingers to be reduced to powder, you may conclude that the operation has succedded well, and ought now to be concluded. Having flood long enough to loose its acquired heat, and will suffer you to handle it; part these fellow-fufferers, by taking the Venice-Turpentine into your wet hands, and therewith squeeze from it its friend the water, as clean as possibly; roll it into the figure of a ball, and after a day or two pound and beat it into fine powder, and in a fit place set it to dry, but not too near the fire, which will melt it; and lastly, imprison it in a Gallipot.

This Operation is just like the former; but the two Turpentines are at variance, and differ in their colours; for this is as white as Paper, the other, in the last Chapter, as yellow as Amber: You must therefore of necessity judge this most excellent for the present use; although this more often to be washed with it, before it will endure and acquire a glittering Polish.

Having advanced thus far, let us now proceed to compose the Varnish, by joining one ounce of this powder'd Turpentine to half a pint of Seed-Lace-varnish, in a bottle twice as large as the things you put in, close stop. When it has flood some small time on an ale fire, take it off; unstop, and shake it: be sure to do so, until the Turpentine be dissolved to the bigness of a large Pea; and after two days have both cool'd and settled it, decant and separate the clearest, which is now in readiness for your work. Your piece therefore lying before you drawn and finished, waiting for security against all damages, fortify after this manner. Take a neat, clean, varnish-Pencil, large or small, as your work is in its Area, surface and breadth; for a large Table or Box requires a great Pencil, and so the contrary. This Pencil being dip't into a Gallipot, wherein you have poured some of the said varnish; when you take it out, always stroke it against the sides of the pot, for fear it should be too full and overburthened with varnish, which will incur this inconvenience. That will lie thick and rough in some places, whereas a smooth and even superficies is its greatest beauty. This, without any distinction, must wash over your whole work, both draught and ground: And you must do it five or six times, as you see the gold and metals keep their colour, gently warming and thoroughly drying it between every wash: and indeed it must be but just warm, for if more, it will ruine all your labour. Having observed these rules, as also that it must by all means be evenly and smoothly done; let it have rest for three or four days before you attempt any
any thing further upon it. After this time is past, provide some Tripole, scraped with a piece of glafs, and a fine rag, which dipt in a bafon of water, and some powder of the fame Tripole being lick’d up by the faid cloth, therewith in a moderate way, neither too hard or too foft, rub and froke, until it becomes fmoother and glossy; but if it fhould come fo near your gold or draught as to moleft and displace it, utterly defift, and rub no more there, but let your chief aim be to render your ground or black, bright and fmoother, for there your wavings and unevenfs will be most difcernable. Now to fetch of the Tripolee, take the foftest Spunge fok’d in water, and with it wash it off, and a clean cloth or rag to dry and free it from all the Tripolee that remains. But becaufe this will not free the crevifes and fine lines from it, mingle a little oyl with a like quantity of Lamblack, and greate your Table all over with the fame: now to fetch off this too, labour and rub with a fine cloath, until your Lamblack and Oyl vanifh and disappear. To conclude this tedious buifnefs; Take one fine clean rag more, and therewith rub and froke until a glafs is acquired, and that it gliften and reflect your face like a Mirror or Looking-glafs.

I fuppofe by this time it is apparent, what trouble, pains, care, and accuracy, accompany our Undertakings; and if to thefe you prefix the Skill, Fancy, and fine Hand of the Artift; I fay all thefe muft enhance, and fet an high price upon good Japan-work.

Thefe instructions for compofing Varnifhes, the muft needful and beft for all works of this kind, being thus fully laid down: it will be no ways prejudicial to give some Rules, which muft be moft ftrictly obferved in all forts of Varnifhing, and to inform you how you may employ thefe Varnifhes about other Woods; or to lay Blacks, and other colours, which are much in vogue with us and the Indians. We grant, it is not a part of Japan-work properly, but rather foreign to that defign, but its univerfal benefit will abfurdantly compenate for that pretence, and the knowledge of it cannot certainly prove burthenfome to any: But to thofe efpecially it is advantageous, who living in the Country remote from Artifts, cannot without great trouble move or alter any thing they have by them, unless aflifted by this our information.

C H A P. III.

General Rules to be diligently oberved in all manner of Varnifhing.

I am very follicitous that your Work fhould fucceed, and there-fore take all imaginable care to guide you, fo that you cannot poftibly miscarry; and in order thereunto I fhall propofe Rules and gene-
general Cautions, which I desire you would have always in mind, and call them to your assistance in all your undertakings.

1. Therefore let your wood which you intend to varnish be close-grained, exempt and free from all knots and roughness, very smooth, clean, and well ruff'd.

2. Lay all your Colours and Blacks exquisitely even and smooth; and where ever mole-hills and knobs, asperities and roughnes's in colours or varnish offer to appear, with your Ruff sweep them off, and tell them their room is more acceptable to you than their company. If this ill usage will not terrifie them, or make them avoid your work, give them no better entertainment than you did before, but maintain your former severity, and with your Ruff whip them off, as often as they moleft you.

3. Keep your work always warm, by no means hot, which will certainly blister or crack it; and if that mischance through inadvertency should happen, tis next to irreparable, and nothing les's than scraping off all the varnish can rectifie the miscarriage.

4. Let your work be thoroughly dry, after every distinct walfe; for neglect in this point introduces the fault again, of which we warned you in the second rule, That your varnish should not be rough and knobby.

5. Let your work lie by and reft, as long as your convenience will admit, after tis varnifhed; for the better will your endeavours prove, the longer it stands after this operation.

6. Be mindful to begin your varnifhing stroke in the middle of the table or box that you have provided for that work, and not in full length from one end to the other; so that your brush being planted in the middle of your board, strike it to one end; then taking it off, fix it to the place you began at, and draw or extend it to the other end; so must you do till the whole plane or content be varnifhed over. We have reasons too for this caution, which if neglected, has several faults and prejudices attending it; for if you should undertake at one stroke to move your Pencil from end to end, it would so happen that you would overlap the edges and mouldings of your box; this overlapping is, when you see the varnish lie in drops and splashes, not laid by your brush, but cauf'd by your brushes being at the beginning of the stroke overcharg'd and too full of varnish, and therefore we advice you to stroke your pencil once or twice against the sides of the Gallipot, to obstruct and hinder this superfluity; small experience will difcover these mistakes.

7. When you come to polifh, let your Tripolee be scraped with glafs or a kniife: for fine work your rags must be fine, and your Tripolee too delicately small, and powder-like; and fo for common work, coarfe linen, and coarfer Tripolee will be very serviceable: let your hand be moderately hard, but very even, in all your polifhing-strokes; and remember to polifh and brighten one place, as much as for that time you intend to do, before you forfake it, and pass over to another. For

8. Re-
8. Remember, never to polish your work as smooth as you intend at one time, but let it rest two or three days if you can after the first polishing, and then give it the finishing and concluding froak. Be circumspect likewise that you come not near the wood, to make your piece look thin, hungry, and threadbare: should you therefore injure your workmanship after this manner, it will demand another varnishing for satisfaction and reparation.

9. Take a large quantity of Tripolee at the first polishing, till it begins to become smooth; afterwards, a very small parcel will suffice. Circumspectly examine your Tripolee and clout, lest some mischievous, unwelcom gravel, grittiness, or grating part, make its fine grained stow in, and rake or scratch your work; it will prove no case matter to hide the flaw and damage: and if ever it should happen, you must retrieve your negligence by your labour, and with your cloath wrap about your forefinger polish the faulty place until you have brought it to a good understanding and evenness with the rest of the piece, and the wounded part to be no more visible.

10. When you resolve to clear up your work, and put it in its best apparel, remove and wash off your Tripolee with a Spunge and water: drink up that water with dry linnen, and with oyl mixt with Lamblack anoint the whole face of your work; let no corner or moulding escape, for this will totally free your piece from the lurking Tripolee. Now is time that these should withdraw, and as they turned out the Tripolee, so must a clean linnen rag displace them, and put them to shift for new quarters; and then with another clean, very fine, soft, dry cloath, rub it all over; spare no place, or pains, but rub it all with a nimble, quick froak, and as hard an hand, and the fruits of your industry will be a dazzling lustre, and an incomparable gloss.

Lastly, for white-work, be kind and gentle to it, let your hand be light and even, and your skill in polishing it neat and curious; and observe, that when tis to be cleared up, you must not pollute and dawb it with Lamblack, but oblige it with oyl and fine flower instead thereof.

To conclude, let this Chapter be well studied, and remember, that without it you cannot regularly or safely perform the task: This is the Common-place-book, to which I shall continually refer you; and if you will prove negligent and remiss in this particular, I shall prophesie, that nothing can so infallibly attend you as Error and Disappointment.
Of varnishing Woods without Colour.

To varnish Olive-wood.

Hat remains then, but that from Precept we proceed to Practice, that from mean and ordinary endeavours we successively rise to the excellence and perfection of this Art. To begin with Olive-wood, which for Tables, Stands, Cabinets, &c, has been highly in request amongst us; that which is cleanly workt off, void of flaws, cracks, and asperities, is a fit subject for our skill to be exercised in. Having rashed it all over diligently, let it by a weak fire, or some place where it may receive heat; and in this warm condition, wash it over ten or twelve times with Seed-Lacc- varnish, that remained after you had poured off the top for a better use, with a pencil proportioned to the bigness of your Table or Stand, or the like; let it thoroughly dry between every wash; and if any roughness come in sight, rub them off as fast as you meet with them. After all this, welcome it with your Ruth until its smooth, and when very dry, anoint it with several times with the top or finest part of the aforesaid Seed-Lacc-varnish. After three days standing call for Tripolec sapered with a knife; and with a cloth, dip first in water, then in powdered Tripolec, polish and rub it till it acquire a smoothness and gloss: but be circumjected and shie of rubbing too much, which will fret and wear off the varnish, that cannot easily be repair'd: If when you have labour'd for some time, you use the rag often wetted, without Tripolec, you will obtain the better gloss. Then wipe of your Tripolec with a sponge full of water, the water with a dry rag; grate it with Lambblack and Oyl all over; wipe off that with a cloth, and clear it up with another, as I have most fully showed in the last Chapter, to which I refer you. If after all this pains your work look dull, and your varnish misty, which polishing before is dry, and damp weather will effect; give it a flight polish, clear it up, and that will restore its pristine beauty: If you have been too niggardly of your varnish, and there is not enough to bear and endure a polish, use again your finesf Seed-Lacc, and afford it four or five washes more; after two days quietness polish and clear it up. Should any one desire to keep the true natural, and genuine colour of the wood, I counsel him to employ the white-varnish formerly mentioned, as every where answerable to his purpose; for this being of a reddish tawny colour, and so often washed with it, must necessarily heighten and increase the natural one of the Olive.

To varnish Walnut-wood.

To avoid a tedious and troublesome repetition or tautology, I shall refer you to the last Chapter, and desire you to observe the
fame method exactly for varnishing Walnut, that I gave you for Olive. And further take notice, that those Rules will hold good also for all sorts of wood, that are of a clofe, smooth grain, such as Yew, Box, the Lime-tree, and Pear-tree, &c. Thus much may suffice for varnishing woods without colour; we pass over from hence to treat of the adorning woods with colour, and of each in its order.

CHAP. V.

Of varnishing Woods with Colour.

Of Black Varnishing or Japan.

Black varnishing is done in imitation of Japan-work; and becaufc the making this very good is a great ornament to the whole undertaking, I shall give you the best account I can possibly for the making it. Having provided wood, clofe-grained, and well wrought off, rub it smooth, and keep it warm by a fire, or in some hot place; but be always cautious, that whilst you varnish, you suffer not the piece to take the eye of the fire, that is, come to near it as to burn, scorch, or blister your work, which is an unpardonable fault, and remedied no other way when committed but by scraping off the varnish, as I hinted in the Chapter of Rules and Directions. Those that make it their trade, generally work in a Stove, which is beyond all dispute the best and safest way; and I would advise those, who intend to make it their employment, to use no other; because it gives an even and moderate heat to all parts of the room; but those who for pleasure, fancy, and diversion only, practice; for them I say, a great fire in a clofe, warm chamber, may perform it as well. In the next place, pour some of the thickest Seed-Lacc-varnish into a Gallipot, adding to it as much Lamblack as will at the first wash blacken and discolor the work; the Colour-flaps furnish you with it for 2d, 4d, or 6d the barrel, whose price is equal to its bignefs: With this varnish and black mixt together varnish over your thing three times, permitting it to dry throughly between every turn. After this, take more of the Lac-varnish, and mix with it Lampblack to the fame degree of thickness with the former. This is the only black for this businefs, I prefer it before Ivory, (tho fome differ with me on this point;) this is a fine, soft, and a very deep black, and agrees best with the varnish; how you fhall make it, I will in the next Section direct you. With this black composition wash it over three times, between each of them rubbing it smooth, and suffering it cleanly to dry. Then with a quarter of a pint of the thickest Seed-Lacc, mix of Venice Turpentine the bignefs of a walnut, and make them together until it is dissolved, and observe this proportion in lbs or greater quantities. Now put in Lamp-black enough to colour it,
and no more, and with this wash it five times, letting it stand 12 hours between the three first and the three last washings. Having thus cloathed the piece with ordinary varnish as with a common under-garment, we now intend to put on its gayest apparel, and cover it all over with the top and finest of the Seed-Lac-varnish, which must also be just coloured and tinged with the Lamp-black: twelve times must it be varnished with this, standing as many hours between the first and the last washings, with this never to be forgotten caution, That they stand till they are dried between every distinct varnishing. After all this give it rest for five or six days before you attempt to polish it; that time being expired, take water and Tripolee, and polish it according to the directions I have assigned and taught you in the Chapter for Olive-wood: but however take along with you this further remark, That you allow three times distinct from each other for polishing; for the first, labour at it till tis almost smooth, and let it stand till two days; the second time, polish till it is very near enough and sufficient: lay it aside then for five or six days; after which, lastly, polish off, and clear it up as you were before instructed. Following this course, I have, I will assure you, made as good, as glossy, and beautiful a Black, as ever was wrought by an English hand, and to all appearance it was no way inferior to the Indian.

I promised to detect and lay open the whole Art, and do resolve by no means to fall short of my engagement. I intend therefore to pleasurify you with another way to make good Black, and having variety you may take your choice, and try either, as your fancy or Genius is inclined. I must confess, I have made excellent good black this way too, and such as in all respects would match and parallel the foregoing. Lay your blacks as before, and take of the best Seed-Lac-varnish, and the White-varnish, (I mean the first White that I taught you to make in this Book) an equal quantity, and vouchsafe to give it a tincture only of your Lamp or Ivory-black; wash your work with it five or eight times, let it stand the space of a day or two, and dry between every turn; then repeat it four or five times more, keeping it but jut warm, and having reft a day or fo, anoint it as often with the fine Seed-Lac-varnish only. To conclude, in a weeks time, after all this has been done, it will be dry enough to polish, and not before, which you may then do, and clear it up. You will obferve, that your glossy performances after some little time may happen to wax dull, mift, and heavy; which a slight polish will remedy, with clearing it up afterward. Now the caufes of this disappointment are two: either first, your varnish is not reafonably well dried, or it has not a fufficient body of varnish; both theſe occasion it to mift, and, as it were, to purl. Tis no hard task to diftinguifh them: if the former is in fault, it will appear dull, but of a full body, and finooth; if the latter, the work will look hungry, and fo bare, that you may almoft, if not quite, fee the very grain of the wood through your varnish.
The Art of Japanning, Varnishing, 

varnish. This last fault is intended by five or six washes more of your fine Seed-lac; the other is allisted by frequent polishings, with dexterity. One Memorandum I had almost pafted over in silence, which I premise I have not any where mentioned: You must look upon it as a necessary remark, and by no means to be omitted, and this it is; To be industriously careful, in laying on your colours and varnish, never to strike your pencil twice over the same place, for it will make your varnish or colours lie rough and ugly: but let every stroke anoint a place not waft before, carrying a steady, quick, and even hand; beginning at the middle of the table, and so conveying your brush to either end, until the whole surface has been pafted over. Perhaps I have here spoken the same thing over and over again; in justification whereof, I al-

lege what Seneca did to thofe, who objected that he was guilty of tautology, and repetition; “I only (fays he) inculcate often the fame precepts to thofe who commit and reaf the fame vices: This is my cafe; if you charge me with that fault, my plea is his; I often admonifh you, and infert many cautions which refer to the fame error, and apply'em to thofe who are subject to frequent mi-carriages.

To make Lamp-black.

Being furnished with a Lamp that has three or four Spouts, for as many lights and cotton-week, which you may have at the Tal-low-chandlers, twifted up fo big that it will but just go into the nofe of your Spouts; for the greater light they make, the larger quantity of black is afforded. Procure a quait of oyl, by the Oyl-lhops rated at 6d. and fo much will make black enough to ufe about a large Cabinet. Get a thing to receive your black in, fuch in shape and ftance as you may often fee is planted over a candle to keep the flame and fmoak from the roof or ceiling of a room. Having placed your weeks in their proper apartment, and put in the oyl, fire or light 'em, and fix your receiver over them fo clofe, that the flame may almoft touch them. After it has continued fo the space of half an hour, take off your receiver, and with a feather strike and sweep off all the black on it. Snuff your weeks, and put it on again, but forget not to supply your Lamp with oyl, as often as occafion fhall require; and when you imagine more black is ftuck to the receiver, do as before directed: and thus continue and perfevere, until you have obtained black enough, or that all your oyl is burnt up and exhausted. This is that which is properly called Lamp-black, and is of excellent ufe for black varnish.

White Varnishing or Japan.

You cannot be over-nice and curious in making white Japan; nothing must be used that will either foil or pollute it, in laying on the colour, or in varnifhing. Your firft neceffary therefore is flin-
glafs-fize, (to make which the next Section fhall instruct you;
The Art of Japanning, Varnishing, &c.

Scrape into it as much whiting, as will make it of a reasonable thickness and consistence; or so long, till by a streak with your pencil dipt into it, it will whiten the body which your brush has passed over; your own discretion is the best guide. Suffer it not to be in extremes, either too thick or too thin; but with your brush, made of the softest Hog's hair, mix and incorporate very well the whiting with your size. This being prepared, whiten your work once over with it, and having flood till it is thoroughly dry, do it all over again; and when dry, repeat it a third time: after which let it stand twelve hours, but be sure to cover and defend it from dust before it is varnished. Take then some rushes; rub it as smooth and as close to the wood as you can conveniently. This done, procure some white flake, with which the Colour-shops can furnish you; mix it too with your size only, that it may be with a full, fair body on your piece. With this, three or four times whiten your work, giving it sufficient time to dry between each of them; then rub it extraordinarily smooth, but be not now so bold as you were before; adventure not to come near the wood, but by all means keep your distance. These two sorts of white being in use, we charge you with a third, and that is, white Starch, boiled in fair water, until it come to be somewhat thick, and with it almost blood-warm wash over the whole, twice; never forgetting that it should dry between every turn. After 24 hours rest, take the finest of your white-varnish, and with a pencil (first washed in spirit to clean it from dust) anoint or varnish your work fix or seven times, and after a day or two do the like again. These two fits of varnishing, if done with a fine careful hand, will give it a better gloss than if it were polished; if not so accurately performed, its requisite to polish it; and in order thereto, you must below five or six washes of varnishing more than to the former: so that if it is done so well, that it stands not in need of a polish, two turns of varnishing will suffice; but if it must be polished, three are absolutely required, besides a weeks rest before you begin polishing. Care and neatness should attend this operation from one end to the other; for in polishing, your Linnen and Tripole must be both of the finest; your hand light and gentle, your cloth neither too wet, or too dry; and when you clear it up, and give it the finishing, concluding streak, fine flower and oil must be admitted to the performance, but Lamp-black utterly laid aside and excluded.

To make Japla-Size.

Take an ounce of Japla's, divided or broke into small pieces; let it stand in a clean Pipkin, accompanied with a pint and a half of fair water, for twelve hours together. Place the vessel in a gentle fire, suffer it to boil mighty leisurely, and continue stirring and simmering, till it is wholly consumed and dissolved in the water. After the water is wafted and boiled away to a pint or less, remove it, and let it stand in a convenient place to cool. This when cold,
The Art of Japanning, Varnishing, &c.

cold will turn to a jelly, which we call Flings-lize. You are advised to make no more than what will serve your present occasions, for two or three days will totally deprive it of its strength and virtue. This is of great use, not only in the foregoing white-varnish, but several other things, hereafter to be mentioned.

To make Blee Japan.

This task calls for several ingredients, and those too diversely prepared, before they can be admitted to the composition. In the front white-lead appears, which must be ground with Gum-water very finely on a Marble-stone. The next in rank is some of the best and finest Smalt, (to be met with in the Colour-shops,) which you must mix with Flings-lize; adding, of your white-lead so grinded, a quantity proportionable to the Blee you intermix with 'em, or as you would have it be in strength of body. All these well stirred and tempered together, being arrived to the confidence and thickness of common Paint, wash over your work with it, and, when perfectly dry, do the like three or four times, until you observe your Blee lies with a good fair body; if it should so fail out, that the Blee should be too pale and weak; put more Smalt, and no white-lead into your lize. Having rushed it very smooth, strike it over again with this stronger Blee: soon after, yet not till it is very dry, with a clean pencil give it, at two several times, as many washings with the cleanest Flings-lize alone; and lay it aside for two days carefully covered, to preserve it from dust. The same diligence forget not in making White-Japan, which does as absolutely require a covering, until either of them is secured by a proper mantle of their own varnish, which is sufficient to guard 'em against all injuries of dust or dirt. But to proceed: When you have warmed it by the fire, employ again your cleanest pencil, dip it in a small portion of white-varnish, anointing your work seven or eight times; deficit then for one day or two, after which wash it again as often as before. Lay it aside for the same space of time, which being expired, repeat your washes the third and last time, as often as formerly. So many operations certainly deserve some leisure minutes, and a week at least must be past over, before you dare presume to polish it. When that is done, with Lamkblack and oil clear it up, and lend it a glistening, smooth, and pleasant countenance. Observe, that your Blews being more deep and dark, thin or pale, depends wholly upon the different quantities of white-lead, that are mixed with the Smalt after the first washes: for as a small proportion of Lead introduces the first, so a greater plenty occasions the latter.

Let this serve for a general caution in laying either Blews, White, or any other colours with Flings-lize; Let it not be too strong, but rather on the contrary very weak, but just sufficient to bind your colours, or make them stick on your work: for if it be otherwise, it will be apt to crack and flie off. But last of all, when
when you lay or wash with clear Linglafs, to keep you varnish from soaking into, or tarnishing your colours, then let it be of a strong and full body.

To make Gum-water

Hardly any can be ignorant of the making of this; tis very common, and easy, and the composition consists of two bodies only. In three quarters of a pint of fair water dissolve one ounce of the whiteft Gum-Arabick, carefully and cleanly picked; if you keep stirring and shaking it, the sooner 'twill be dissolved; which done, strain it through a fine Holland-rag into a bottle, and if you want it, use it.

To make Red-Japan.

This beautiful colour is made several ways, and we want not drugs and mixtures to vary the different Reds, and humour all fancies whatsoever. I shall confine their variety to three heads: 1. The common ufual Red; 2. the deep, dark; and lastly, the light, pale Red. Of thefe in their order.

In contriving the firft, Vermilion defervedly claims the chief place: Tis mixt with common fize by fome, by others with the thickelt of Seed-Lace. The laft I judge moft fit and ufeful, for this reafon; because it will not then break off in polishing, as that mixt with fize frequently does: neither is it more chargeable, fince it helps better to bear the body of varnish that fhall be fpread over it;

Your mixture should keep a medium between thick and thin; tis difficult, and almoft impoffible to affign exact Rules for mingling your Colours, in general we tell you between both extremes; fmall practice and experience will mafter this feeming difficulty. Your work being ready and warm, produce your Vermilion well mixt with the varnish, and falue it four times with it; then allow it time to dry, and if your Reds be full, and in a good body to your liking, rufh it very fmooth: fo done, wash it eight times with the ordinary Seed-Lac-varnifh, and grant it a repofe for twelve hours; then rufh it again, though lightly, to make it look fmooth. And lastly, for a fine outward covering below eight or ten waftes of your beft Seed-Lacc-varnifh upon it: and having laid it by for five or fix days bring it forth to polish, and clear it up with Oyl and Lamblack.

The next in fucceffion to be discours'd on is the dark, deep Red. When you have laid on your common Red as before directed, take Dragons-blood, reduce it to a very small fift or powder, and as your judgment and fancy are inclined, mix it, a little at a time, with your varnish; and indeed you will find, that a very small portion will extremely heighten your colour, as alfo that every waft will render it deeper; but when you find it has acquired a colour almoft as deep as you defign, forbear, for you muft remem-

ber you have more varnish of Seed-Lace to lay on, which will add and fupply what is wanting. Consider therefore how many waftes are
are still to be laid, and according to that use your Sanguis Draconis, or Dragons-blood. This performance differs no way from the former, but must be managed by those rules given for polishing and clearing the other Red, the Sanguis only excepted.

But in the third place, to oblige any person that is an admirer of a pale Red, we assign these instructions. Take white-lead finely ground with your Muller on the Marble-flone, you must grind it dry; mix it with your vermilion till it becomes paler than you would have it, for the varnish will heighten it: stir therefore vermilion, white-lead, and varnish together very briskly; which done, give your work four washes, and then follow closely the prescriptions laid down for the first Red varnish. You must in the foregoing mixture consult with your self, how many times you are to varnish after the Red is laid; for if many, consider how they will increase and heighten the colour, which for that reason must be paler, and have a more large portion of white-lead allotted it. By these means we have opened a spacious field, we have discovered the very nature of the thing; our Art has been freely displayed, and we have been neither penurious or niggardly in our communications: What admirable Products may we expect, when a lively and unlimited fancy is exercised in an Art that is equally boundless and unconfined.

To lay or make Chestnut-colour-Japan.

This colour is now very much used, and of great esteem, especially for Coaches; I have also made other things, as Tables, Stands, and Looking-glass-frames. I must of necessity declare, that it sets off Gold and Metals well: and because variety in every thing that is new is acceptable, but chiefly to the ingenious Gentry, for whom these pages are intended, I could not in silence pass this colour over.

The things that make up this colour are Indian Red, or else Brown red Oaker, which will serve as well: of either, what quantity you imagin will serve your turn, and with a Muller or Marble-flone grind it, mixed with ordinary size, as fine as butter. From thence translate it to a pottinger; then take a little white-lead, and laboriously grind it after the former manner, and with the same size: In the third place, have Lamblack ready by you; mix this and the white-lead with the Indian Red or Oaker in the pottinger, stirring and incorporating them together. If the colour produced by these three be too bright, darken it with Lamblack; if too dark and sad, affix it with white-lead; this do, until you have maftered the colour you wish for. One thing here commands your memory and observation; The same colour exactly which you make when tis thus mixt and wet, will also arise when tis varnished, although when tis laid and dry, twill look otherwise. Now when the colours are thus managed in the pottinger, let it over a gentle fire, put to it so much common size as will give it a fit temper to work, (neither too thick, or too thin.) Being thus qualified for
bufinefs, call for a fine proportionable Hogs-hair brush, with it wash over smoothly your piece; let it dry, and repeat until your colour lie full and fair. Again, give it a drying time, and rinse it smooth, but by no means clofe to the wood, unlefs you intend to begin your work anew, and varnish it a second time. After a days refl, adorn it with three or four walhes of the fine Seed-Lace-varnish; when that is also dried on, varnish it up to a body, fit to receive a polifh, with your white varnish. To conclude, its due and neceffary time being fpent, polifh and clear it up with Lamblack and Oyl.

To make an Olive-colour.

This performance is every way anfwerable to the former; only instead of thofe put English Pinck: grind it with common fize, and when it has attained the conftance of butter, convey it to a pottinger, and there Lamblack and White-lead mixt with it produce the Olive-colour; if too light, Lamblack will prevent it, if too dark the other. But farther, if you think it looks too green, take raw Umber, grinded very fine with fize; add of that enough to take away that greennefs: And nothing then remains but a due heed and obfervance of the foregoing rules for Chefnut. But before we leave this Section, remember, That all colours laid in fize will not endure to violent a polifh as thofe in varnish, but are more fubjeft to be rubb'd off.

By thofe methods you may make any colour you can fancie; with this admonition, That all colours, which are light and apt to tarnifh, and loose their gloffy beauty, with Seed-Lacc, muft be humour'd and varnifhed with White-varnish, the Seed-Lace being prejudicial.

CHAP. V I.

To work Metals or Colours with Gum-water.

W HENfoever you design to work Japan in Gum-water, you are advifed to mix all your Metals and Colours, and every thing you make ufe of, with this Gum-water. But because there is no general Rule without exception; therefore we understand all colours, except thofe which before we called Transparent ones, for they require a different and distinct way of operation, as the beginning of this Treatife has directed.

When you defign a mixture, forget not to stir the ingredients very well, together with the water, in a Muflele-shell, which I conceive is more proper for this undertaking, and for that reafon defire you to furnish your felf with a great number of them. Be cautious, I beg you, that you make not the mixture of your metals or colours with the gum-water either too thick or thin, but endeavour to keep the golden mean between both, that it may run fine
fine and smoothly from your pencil. Beside, be not prodigal, lavish, and profuse of your metals, but make a quantity requisite for your present business only, and provide not for time to come; for from a mixture of this nature, made in too large a proportion, several inconveniences arise. As first, in some short time, the metals standing useless, wax dry, so that they must be wetted for a second employment with the said gum-water, which by repetition corrupts both the metal and the colour, by receiving too much of gum in them: and although this might be likewise prevented, by adding fair water instead of that mixt with gum; yet in spite of all care and diligence, and beyond expectation too, another trouble and fault accompanies it, and that is, the dust will gather to them and render 'em unfit and unserviceable. Again, for your colours especially, your Shells must be often shifted and changed, otherwise the gum and colours will be both knobby and drie, in that unelemented posture sticking to your shells. I believe it will be your own negligence, and the fault will lie at your door, if after every minute caution and remark, whereby you may not fail of success if they are observed, you should through inadvertency miscarry. But to proceed: Your metals or colours thus prepared, well mixed, and ready for the business, stir them with the pencil about the shell, and draw it often on the side of the shell, that it may not be overloaded with the metal, when you design to draw small strokes; on the other side, not too drie, because you must be careful in making all your strokes full and fair, by no means thin and craggy; carry your hand even and steady, and finish your line before you draw off your hand, otherwise you may incur making the stroke uneven, and bigger in one place than another. But when you attempt great broad things, as Leaves, or large work, then charge your pencil very full, with this proviso only that it does not drop. Here is one observation to be made for Gum-water, which in Gold-fize is useless and unnecessary, and indeed very advantageous for learners, and the unskilful especially, and by them in a particular manner to be remarked and observed. But first; this useful for all; for that place you intend to make your draught in must be rubbed with a Tripolee-cloth: the reason is this; your black, when cleared up, will be so glossy, and as it were greasy, that your metal or colour will not lie on it, unless it be primed with the Tripolee in that manner. So when you find any such greatinesse on your work, rub it with your Tripolee-cloth, and permit it to dry; after which you will perceive the draught of your pencil to be smooth and neat, and to your liking and satisfaction.

Now that which I before spake of in behalf of beginners is this; It may very reasonably be supposed, that a practitioner in his first attempts may not frame his piece even and regular, or his lines at a due distance: now upon these or any other accounts, if he is displeased at his own handy-work, he may with this useful Tripolee-cloth wipe out all, or any part which he thinks unworthy to stand, and
and on the same spot erect a new draught; by these means he may mend, add, blot out, and alter, until the whole fabric be of one entire make, good and answerable to each part of the undertaking. I cannot better in words express my self, or with my pen deliver more full or plain rules for mixing your colours and metals; neither can I with my tongue more steadily guide your hand and pen. I am apt to flatter my self so far, as to believe what I have communicated may abundantly suffice, and shall therefore add nothing more with relation to laying metals or colours, and the manner or method of working them in Gum-water. That part of our Profession which we call Setting off, or, which is the fame thing in other words, Seeding of Flowers, Veining of Leaves, Drawing of Faces, and making Garments, defires not our present consideration, but shall be handled in the following pages.

CHAP. VII.

To make Gold-size.

This is the other famous composition, which is in great esteem and use for laying metals and colours, and ought in due manner to be made known; but we shall first give you the method of mixing those things which are concerned in its production. Their names and quantities are, of Gum animæ one ounce; Gum Espalum one ounce; Lethergi of Gold half an ounce; Red-lead, brown Umber, of each the like portion. To these, flutt altogether in a new earthen pipkin, large enough to hold one third more than you put in, pour of Linseed oyl a quarter of a pint, of drying oyl half a pint, with which you may be furnished at the colour-shops. Place this earthen vessel thus loaded over a gentle fire, that does not flame in the leaf, keeping it continually warm, that it may but just bubble up, or almost boil; should it rise over, your chimney and materials would be in danger: if you perceive it swelling, and endeavouring to pass its bounds, remove it from that hot place to a more cool and gentle. When first it begins to simmer and boil a little, with a stick keep moving and flitting it, until the whole mass of Gums be incorporated and melted; not that you must deft or forbear stirring until it become as thick and ropy as Treacle, for then it is sufficiently boiled. This done, convey the pipkin to a cool place, and there let it rest, till the extremity of heat is over. After which time, strain it through a coarse linen cloth into another earthen pot, there to cool, and lie ready for use. This is the manner of its composition. I shall now inform the ways of working it. When your business shall call for this Size, bring forth what quantity you require for the present, and put it into a muscle-shell with as much oyl of Turpentine as will dissolve the size, and make it as thin as the bottom of your Seed-Lace.
Hold it over a candle, and, when melted, strain it through a Linen rag into another shell. To both these add vermillion enough to make it of a dark red; but if this make it too thick for drawing, afford it as much oyl of Turpentine as will make it thin enough for that purpose. The main, and indeed only design of this Size, is for laying on of Metals, which after this manner must be performed.

When you have wrought your work, and that which you intend to decipher on it; draw this Size all over that part, and that part only, which you resolve shall be gilded or adorned with gold, paffing over those places where you think to lay your other metal or colours, as Copper, Silver, or the like. Your Size being thus wrought for the Gold, let it stand till this be dry, that when you put your finger upon any of it, it may be glutinous and clamy, and stick a little, but not so moist that the least spot or speck should come off with your fingers, not unlike to thick glue when this is half dry. When you find it agrees with the characters we have given you, conclude that to be the critical minute, the very nick of time, wherein you must apply your Gold; then take a piece of oyle, waft leather, or the like: this being wrapped about your forefinger, dip it into your gold-dust, and rub where the gold-size is laid, for it will stick on the size, and no where else. If any dust of Gold lies scattered about your work, with a fine varnishing-brush, that hath not been used, brush or wipe it all into your gold-paper. This being thus finished, take your pencil in hand again; draw that part which you design for Copper with Gold-size also; and when dry, cover it with Copper after the same method that you received for Gold. A third time weld your instrument, the pencil, and lay Size for Silver, and operate as aforefaid; so likewise for all dead metals, wherefoever you design them: Only take this remark along with you, That you lay your metals successively one after another, suffer each to dry and be covered, before you begin a distinct one; as for instance, Your Gold-size must be dry, and gilded before you proceed farther, and so of the rest. After all these, lay your colours with gum-water if you are pleased to infert any, reserving the Rocks for the last labour; which how to perform, in the succeeding discourse shall be demonstrated.

It may often so fall out, that you'll mix more Gold-size than at one time may be consumed, or you may be called off from your business for a day or more. Now to preserve it entire and moist enough, and in condition fit to work again next time, observe that after it has flood five or six hours, a film or skin will arise and overspread the surface of it; then put it in water, and let it remain there with the pencils covered too, until your next operation shall define their assistance; before which, you must stir it well together, and employ it as you think fit. If it should chance to grow thick, the old remedy, Venice Turpentine, will relieve it. But farther, if by frequent mixture with Turpentine, often putting into water, or
long standing, it becomes skinny, thick, and knobby, and by con-
sequence unserviceable; the best use you can possibly put it to, is to
call it away.

I shall conclude this Chapter with my requests to you, so to or-
der and compose your Size, that, being of a good mediocrity, nei-
ther too thick or thin, it may run smooth and clear, and your
strokes be fine and even; in some time you will be so skilful, and so
delighted with your draught, that the most subtle, neat, and hairy
lines will adorn your piece, and your work in all good qualities may,
though not exceed, yet vie with, and parallel the Indian.

---

CHAP. VIII.

To varnish Prints with White Varnish.

Procur a Board very fit and exact to the Print you resolve to
varnish, and thus manage it. Get common Size, which you
may have at the Colour-grocers; warming it by the fire, scraping
whiting into it; make it of an indifferent thickness, and with the
softest hogs-hair-brush, proportionable to your board, wash it once
over, permitting it to dry: then white it again, and so repeat, till
it lies with a fair body, and quite covers the grain of the wood,
which may be of Deal, Oak, or any other. This done, take off
your whiting with rushes very close, and smooth, but not so far as
to discover the grain: then with flower and water make a paste
thick as starch, and with your hand or brush work or dawb over
the backside of your Print, with an even steady hand lay your
Print on the board, and stick it on as close as you can with all ima-
ginable diligence. Suffer it not to cockle, wrinkle, or rise up in lit-
tle bladders; if it should, press it down with your hand, but be
sure your hands be extraordinarily clean and free from all dust,
filth, and pollution when you come to paste the Print on the Print, that it
may not in the leaf be foiled, before it is varnished. Smooth down
the whole paper with your hand, past it over and over, that every
part thereof may stick close and adhere to the whiting. I cannot
here burden you with too many cautions and caveats; for if any
the least part of your Print rise or bubble, the whole beauty and
pride of the Picture is destroyed when you come to varnish. Be-
ing thus closely and carefully fixt to the board, set it by for 24
hours, or longer; then take the cleanest of your finest brushes, and
with a soft pencil wash over your Print; but be certain it be dry
before you pass it over again, which you must do with a quick
hand, and not twice in a place; give it leisure to dry, and afford it
one wash more, with two days rest: Afterwards with the finest
and cleanest of your white- varnish grant it fix washes by a gentle
heat, not too nigh the fire, to avoid blistersing. When 24 hours
are
are past, give it eight washes with the said clear varnish: lay it a-
side for two days, and then vouchsafe to anoint it six or seven
times more, giving it leave to rest two or three days. Having ad-
vanced thus far, with linen and Tripolec, both very fine, polish it,
but with gentle and careful strokes. Lastly, clear it up with oyl and
flower.

This I must needs commend for a pleasing and ingenuous contri-
vance; a new sort of Speculum or Looking-glass, which without de-
ceit gives a double representation. Here the Prince and Subject
may (and not irreverently) meet face to face; here I may approach
my King without the introduction of a Courtier: nay, 'tis so surp-
prising, that though I expect no shadow but that of my friend
given on the paper, it will in spite of me, in an instant too, draw
my own Picture, so to the life, that you might without perjury
swear 'tis the Original. Amorous piece! That (without the aid-
fance of a Cunning man) obliges me with a survey of my Self and
Mistress together; and by this close conjunction, by these seeming
careless of her in Effigie, I counterfeit, may almost antedate our
more substantial enjoyments! Kind Picture too! which will per-
mit me to gaze and admire without intermission, and can sur-
vey me as do her, without anger or a blush! I know very well
no Apelles dare pretend to delineate or make an artificial beauty,
that shall equal her natural: Know, that the perfections of her Bo-
dy as far surpass the skill of the Pencil, as those of her Mind transc-
scend the expressions and abilities of the Pen. But yet, in one cir-
cumstance, and one only, the Picture does excel my Mistress; the
shadow is more lasting than the substance; She will frown, wrin-
kles and old Age must overtake her; but here she lives always
Young, for ever blooming; Clouds and Tempests are banish't from
this Hemisphere, and she blest me with a gracious and perpetual
Smile.

---

CHAP. IX.

How to lay Speckles or Strewings on the out, or inside of
Boxes, Drawers, Mouldings, &c.

Having in readiness a quantity of Speckles, which you think
may answer your present occasion, mix them with so much of
your ordinary Lac-varnish, as will, being put both into a Gallipot,
render them fit to work with a suitable Pencil, but by no means
so thick as you would Colours. For this use only you must re-
serve a Brush, with which you must stir them very well, and your
work being gently warmed by the fire, wash it over with it, and
when dry, again. This repeat, until your Speckles lie as thick and
even, as you could wish or desire them; afterwards beautifie them
with
The Art of Japanning, Varnishing, &c.

with three or four washes of your Varnish mixt with Turpentine, and you have concluded all, unless you intend to polish; for then, having done every thing as above directed, it is required that you give it eight or ten washings of your best Lac- Varnish, which being all successively dried on, you are at liberty to polish it. All forts and variety of coloured Speckles may be thus ordered, except Silver, the laying on of which choice metal deferves the best and finest of your Seed-Lac, instead of the ordinary; and the best white- varnish too, must be employed to bring it to a polish; but if you conclude upon not polishing it, be more sparing of your varnish, for fewer washes will suffice.

CHAP. X.

To lay Speckles on the drawing part of Japan-work, as Rocks, Garments, Flowers, &c.

Before you can proceed to try this experiment, a little Sieve must be framed after this manner. Take a small box, such as Apothecaries employ for Pills, something larger in compass than a Crown-piece, about half an inch deep; strike out the bottom, and in its place bind very strait about it fine Tiffanie, and to prevent coming off, fasten it on the outside of your box with thread, and referve it for your necessities.

Now when your work expects to be adorned with Rocks, Flowers, or the like, use first your Pencil to varnish those places with, and whilst it is wet put some of your speckings into the Sieve, and gently shake it over the place designed for your Rock, until it appears answerable in Speckles to what you intended; but especially when for Rocks, call for a pencil about the bigness of your finger, one that is drie and new, and with it sweep all those fragling Speckles, that lie beyond the wet or varnished part, into the sides and top of the Rock that is thus moistened; for there it will not only stick, but render your work, thicker of Speckles in those places, more beautiful, and oblige it with a kind of shadow and reflection.

This work admits of no idle hours, no interludes and vacations, for as soon as one part is compleated, the other desires to undergo the skill and contrivance of the Artist. When this Rock is drie, the next must succeed in operation; and by this way of working the one, when, and not before, the other is perfectly drie, you may, like the Giants of old, fighting against Jupiter, cast mountain upon mountain, lay one rock upon another, as many as the enterprize of Rock-work is compleated. But obverse, that in sweeping your Speckles into the edges of each Rock, you intermix not one portion of scattered parts
parts into a Rock of a different colour; let them therefore enjoy their proper fireings. When you thus lay your Rocks on your work being cold, it will certainly for the present look dull and heavy, may to that degree, that you might very well suggest to your self nothing less than the damage and ruine of the whole undertaking. But though no signs of life, beauty, or shadow do appear, let not this startle or discourage you; for when you have secured it, as we directed before, this fright vanishes, the dangerous Morino or Bugbear disappears, its expected qualities suddenly arise, and by the assittance of your Securing-varnish, it is decked with gay and beautiful apparel.

CHAP. XI.

To make raised work in imitation of Japan, and of the Paste.

To attempt the composition of this Paste, you must provide a strong Gum-Arabick-water, charged with a double quantity of Gum to that we before taught you. Have in readiness an ounce of Whiting, and a quarter of an ounce of the finest and best Bole-Armoniack; break them on your Grinding-stone with the Gum-water, until they are made as fine as butter, but so thin, that when moved into a Gallipot, it may but just drop from the stick with which you work and stir it. If its condition be too thick, gum-water will relieve it; if too thin, you must give it an addition of Whiting and Bole-Armoniack, as much as will make it capable of working well, and regularly. The stick that I spake of before should resemble that of a Pencil-stick, but it must have a more sharp and taper end. This dipt into your paste, drop on the Rock, Tree, Flower, or House which you purpose to raise, and by repetition proceeding until it is raised as high and even as you think convenient. Prevent all bladdering in the paste, which incurvate fault proceeds from a careless and insufficient grinding and stirring of the Whiting and Bole: should you with these blemishes endeavour to raise, your work when dried will be full of holes, and thereby destroy the beautie of it. The only way to prevent it in some measure, when fo dried, is, with a wet fine cloth wrapt about the finger, to rub it over again and again, until the holes and cracks are quite choak't and stop'd up, and after its time of drying is expired, with a rush and all imaginable industry and care smooth it.

These affistances I have laid down only in cafe of necessity, by way of corrections for accidental mifcarriages; for your work will look abundantly neater, if these Errata are prevented by a Paste in the beginning, well grinded and tempered before it is dropped on your work. You are desir'd further to observe, that in the Japan raised
raised-work for Garments, Rocks, &c. one part is elevated and higher than the other; as in flowers, those that are first and nearest to the eye are highest, some leaves too that lie first are higher than those that lie behind. So in the pleats and foldings of garments, those which seem to lie underneath, are always at the greater distance. I will instance in but one more, and that is of Rocks, where in position the first must always surmount and fly well beyond that which skulks behind, and is more remote: The rule holds good in all things of a like nature, and if you endeavour to counterfeit the Indians who take these measures, 'tis reasonable and necessary to follow their precriptions. I shall affign two ways for its accomplishment, which, if truly and carefully copied out, will come very near the Japan original.

First, after your design is rais'd to a due height, whether Figure or Flower, and well dried, with a little Gum-water, Vermilion, and a Pencil, trace out the lines for the face, hands, or foldage of the garments, for the leaves of your plants and seeds of flowers, or any thing intended, in its proper shape made at first before the raised work was laid, and according to which your Pastel was in such manner directed, and confined by those lines, that were drawn as its boundaries; for unless such stroaks were made, 'tis impossible to laye the paste in its proper figure. This done, three or four small instriments must be procured; one of them a bended Graver, which the Engravers make use of; the rest, small pieces of Steel, in shape like a Chisell of the Carpenters, fastened in a wooden handle, the breadth of the largest, not exceeding a quarter of an inch, of the others sizably less. With these, your raised work must be cut, scaped, and carved, leaving one part higher than the other, keeping due regard to the proportion of the thing you design. But here I must forewarn you of the difficulty of the enterprise; no heavy, rustick hand must be employed in this tender, diligent work; for if in haste or unadvisedly you attempt it, believe me your raised work will break off in several places, to the disgrace of the Artift, and deformity of the piece. Let therefore your tools have an exquisitely sharp and smooth edge, whereby they may cut clean and fine without roughness: And now 'tis time to smooth and fleck it with a brushe that has been often used before, in order, in the last place, to cloath it with any metal you shall judge most proper, as shall hereafter be shewed at large.

The other way which we promised for raised work, is this: Strike or trace out your design, as well the inside as the outward; that is, the shape of your face, neck, hands, legs, the chief stroaks of the foldings of the under and upper garments, foflower, or the like: Then take your Paste, somewhat thinner than you commonly use it, and with it raise the lower garments or parts which require the least raising. Grant it time to dry throughly, and then with a very small pencil dipt into the thickest of your Seed-Lace, varnish just the edges of your raised work; for this intent, that when you advance
advance the higher part, it may hinder the wet incorporating with the drie, which must be avoided; for should it do so, the work will never flow well. This must be performed as often as you elevate one part above another; and fill as your work is exalted, your paste must be thicken’d; and raining each part successively, beginning with the lowest, you are to conclude with the uppermost; and when all is drie, if need require, smooth it with a ruth, and then it is in a condition fit to receive your metal. Make ready then what sort of metal you please to cover it with, mixed in gum-water, and with a pencil destined for the use lay it on the raised work full and fair: give it leave to drie, and with a dogs tooth, which you may have at the Guilders, or a Stone or Agat, by them employed in their Frames and Guilding; burnish your work until it is bright, and shines as much as you desire it should. And farther, dip the pencil into your finest Lase-variell, and lay it over twice; then let it off, or shadow it with what your fancie directs, but of this I shall discourse hereafter. Take notice, that if you grind more paste than you can consume at once, and it be drie before you shall have occasion for it, the second time, grind it again, and set it for your business. You may judge of the strength of your paste, by the easie admittance of your nail presid hard upon it, for then it is too weak, and must be hardened and strengthened by a more strong gum-water. Trials and Experience will give you more accurate, more satisfactory directions. With these ingredients, joined to Art and Skill, it is possible to make a paste so hard, so stubborn, that a violent ftoak with an hammer can neither break or discompose it.

To prepare ordinary, rough-grain’d woods, as Deal, Oak, &c. whereby they may be japanned, and look well,

Provide ordinary Size, used by the Plaisterers, and vended by Colour-hops, dissolve it over the fire, making it pretty warm; mix Whiting with it until it is of a reasonable body and consistence, yet not too thick; then take a Brust fit for the purpose, made of hogs-hair. Lay your work once over with this mixture of Whiting and Size, and so often repeat it, until you have hid all the pores, crevices, and grain of your wood, suffering it to drie throughly between every turn. You may afterwards take a fine wet rag, and rub over your work, making it as smooth as your industry is able; this furnishing it with a cloth dipped in water, we call Water-plaining; when drie, rush it even and smooth, and as close to the grain as possibly you can. This done, wash over your work twice with the thickest of your Seed-Lace-variell; after which,
The Art of japanning, varnishing, &c.

which, if it be not smooth, again rush it, and in a day or so varnish it over with black, or any other colour, as you have been directed in those places where we have treated of it; when it has stood sufficiently, you may apply your self to finish it by polishing.

According to these methods you are to prime carved frames for cabinets or chairs, when you desire they should look well; with this difference, that these must not be polished, and by consequence require not so great a body of varnish, no more than will contribute to a rich and splendid gloss. There is also another way, which I recommend for the most valuable, because the most durable and lasting, but not indeed of so large an extent as the former, being proper only for the tops of tables, boxes, or the like; and thus you must proceed. Boil common glew in water, let it be fine and thin; into which cast the finest saw-dust, until it is indifferently thick, and fit to lay with a brush, which you must provide for that purpose. Run it over once with the glew so mixt; if the grain of the wood be not effectually obscured, wash it again, and two days being given to harden, send it to a good workman or cabinet-maker, who must scrape it with his scraper, as pear-tree or olive-wood are served, and make it as fine and even as possibly he can; then varnish it as you have been learnt to do by pear-tree, or any other smooth wood. This, if well done, will not come behind any for beauty or durability. Tis confess'd, these labours are to be performed only upon cases of necessity, for they are very troublesome; and if every circumstance were truly weighed, not so cheap or valuable as your smooth, close-grained woods, of all which pear-tree is in the first place to be esteemed.

Of Bantam-work.

I think it most proper in this place to speak of the manner of working at bantam, because the way of preparing the wood is much the same with that of priming with whiting. There are two sorts of bantam, as well as Japan-work; for as the Japan hath flat lying even with the black, and other lying high, like embossed work; so the bantam hath flat also, and incut or carved into the wood, as a survey of some large screens, and other things that come from those parts, will beyond all scruple convince and satisfy you: with this difference however, that the Japan-artist works most of all in gold, and other metals, the bantam for the generality in colours, with a very small sprinkling of gold here and there, like the patches in a ladies countenance. As for the flat work, it is done in colours mixt with gum-water, appropriated to the nature of the thing designed for imitation; for the ordering these colours with gum-water, you have already received instructions. The carved or incut work, is done after this manner: Your cabinet or table, be
be it whatsoever you please to work on, should be made of Deal, or some other coarse wood; then take Whiting and Size, as before taught, lay it over your work, permitting it to dry between every wash; this must be so often done, till your primer or whiting lie almost a quarter of an inch thick; but always remember to mix your whiting and size thinner than formerly, and lay it therefore over the other; for if it is too thick, it will not only lie rough and unevenly, but will be apt to fly off and crackle. Having primed it to its due thickness, being dry, water-plain it, that is, as we hinted before, rub it with a fine, wet cloth; in some time after rush it very smooth; lay on your blacks, and varnish it up with a good body, and next of all in some space polish it sufficiently, though with a gentle and easy hand. Being thus far advanced, trace and strike out your design with vermilion and gum-water, in that very manner which you intend to cut and carve it, and very exactly; your figures, Trees, Houses, and Rocks, in their due proportions, with foldage of Garments, leafing of Trees, and in a word, draw it as if it were to stand so without any alteration. This finished, exercise your Graver, and other instruments, which are made of shapes, differing according to each workman's fancy: with these cut your work deep or shallow, as you think best, but never carving deeper than the whiting lies, for 'tis a great error to pass through that and carve your wood, which by no means ought to feel the edge of your instrument. Be mindful likewise to leave black streaks for the draperie of garments, and the distinction of one thing from another; as for example, if you were to work in this manner the great Bird, which is in the 11th Print at the end of this Book; You ought, I say, to carve where the white is, and leave the black untouched, which new not only the feathering of the wings, but the form and fashion of the Bird it self; the same means are to be used in all other things which you undertake. But I should counsel that person, who designs to imitate Bantam work, to endeavour to procure a flight of some Skreen, or other piece; for one single survey of that will better inform him, than ten pages can instruct or demonstrate. Had it been a thing of little trouble, or which might have been useful to the young and willing practitioner, we had inserted a Plate or two of it, for it differs vastly from the Japan in manner of draught; but since this is now almost obsolete, and out of use and neglected, we thought it a thankless trouble and charge to affix a Pattern, which could neither advantage Us, or oblige You: I think no person is fond of it, or gives it house-room, except some who have made new Cabinets out of old Skreens. And from that large old piece, by the help of a Joyner, make little ones, such as Stands or Tables, but never consider the situation of their figures; so that in these things so torn and hacked to join a new fancy, you may observe the finest hodgspodg and medly of Men and Trees turned topie turvie, and instead of marching by Land you shall see them taking jour-
journeys through the Air, as if they had found out Doctor Wilkins' way of travelling to the Moon; others they have placed in such order by their ignorance, as if they were angling for Dolphins in a Wood, or purifying the Stag, and chafing the Boar in the middle of the Ocean: in a word, they have so mixed and blended the Elements together, have made a league between fire and water, and have forc'd the clouds and mountains to shake hands, may deprived every thing of its due site and position, that if it were like any thing, beside ruin and deformity, it must represant to you the Earth, when Noah's Floud was overwhelming it. Such irregular pieces as thefe can never certainly be acceptable, unlefs perfons have an equal eftem for uglic, ill-contrived works, because rarities in their kind, as for the greatest performances of beautie and proportion.

But to return to our buinfes. When you have finifh'd your carved work, and cut it out clean and smooth, with your pencils lay the colours, well and purely mixt, into your carved work, in the manner which your ingenuity shall require, or the nature of it absolutely require. When the colours are finifh'd, the gold may be laid in thofe places where you have defign'd it, with powder-gold, or brafs-duft mixt with gum-water, but that looks not fo bright and rich as Leaf-gold, which the Bantam Artifts always employ; and fo may you alfo, if you make a very strong and thick Gum-Arabick water, which you must lave with a pencil on your work, and whilft it is wet take leaf-gold, cut it with a very sharp smooth-edged knife (on a piece of leather ftraitly nail'd to a board) in little pieces, shaped to the bignefs and figure of the place where you difpoze of it. Take it up with a little Cotton, and with the fame dab it clofe to the gum-water, and it will afford a rich lufter, if your water be very strong; otherwife 'twill look fkarv'd and hungrie, when tis drie. Having thus finifh'd your work, you must very carefully clear up your black with oyl, but touch not your colours, left you fhou'd quite rub them off, or foil them; for this is not fecured, as the other Bantam flat-work is; if wet come at this, the colours will be ruined, and peal off. I confefs I have feen some even of the raffed-work, whose colours would not flir, but none fo fecured and firm as flat, in which you'll feldom or never find some Colours that will not endure a security with varnish, but with the los of their native splendor: but thofe who pleafe may leave out the Varnifhing colours, and fecure their carved work with a pencil, as formerly directed.
CHAP. XIV.

To take off any Japan-patterns in this Book, upon any piece of work whatsoever.

When your Black, or any other colour is varnished and polished not fit for draught, take a particular design out of this Book, or any thing else that is drawn upon paper, with whiting rub all over the back-side of your Print or Draught, and use a linen cloth to wipe off all the whiting that lies rough and dusty on the back-side of your paper so whited. Then lay the Print on the Table or Box, with the whited side next to it, in the very place where you design the Draught should be made, and with a needle or piece of iron-wyer round and smooth at the point, fixed in a wooden handle for the purpose, not sharp to cut or scratch your Paper and Print, which we call a Tracing-pencil; with this, I say, draw over and trace the Print as much as you think necessary, taking the most material and outward strokes, or all others which you imagin are hard and difficult to draw without a pattern. This, by the assistance of the whiting with which your paper was rubb'd, will give the fashion and lines of what you have done, upon the Box or Table. After this, if you draw in Gold-size, use Vermilion mixt with Gum-water, and with a small pencil dip it in, go over those lines made by the whiting; for by this operation it will not easily come off, so that you may work at leisure with the Gold-size. But if you will work your metals or colours in gum-water, then trace or draw over your Design with Gum-water mixed with Brass or Gold-duft. Now either of thefe ways here mentioned, when dry and finished, will work either in Gum-water or Gold-size, as I have formerly discovered.

CHAP. XV.

The manner of working and setting off some Draughts in this Book.

I think by this time I may truly say, That I have in a familiar and easy method proposed Rules for purchasing materials of all sorts, the manner of their composition, with the way of using Varnishes, laying of Metals, Colours, and whatsoever else is necessary, or may claim affinity and relation to the Varnishing and Japanning Art. But because these lines have a double design, to instruct and inform the ignorant, as well as assist those that have a
The Art of Japanning, Varnishing, &c.

small knowledge and finattering in this Science: though I am per-
swed I have sufficiently obliged the latter, yet because I may
not be so clear and satisfactory in my Rules to those who before
never attempted any thing of this nature, to whom tis a perfect
Terra incognita, an undiscover'd Province; for their fakes I shall
willingly make an addition of a few pages, to shew in a plain and
more particular manner the way of working some Patterns in this
Book either in Metals or Colours, by the knowledge whereof they
may be enabled with cafe and inclination to perform any enter-
prise that shall oppose them. To thefe I shall affix the different
ways of letting off and adorning your work, which I have before ra-
ther mentioned and touch't upon, than treated of.

The first eight Copper-prints, at the end of this Book, are seve-
ral designs for small work, of whose differences their Titles will in-
form you: Two others for Drawers of Cabinets; one, of all forts of
Birds flying in Antick figures; two, of Birds great and lets, flan-
ding in various postures; another of Beasts, &c. Two figures of
Chinese men and women, in untoward gestures, and habits: Others,
of Flower-pots, Sprigs, Trees, and the like: Lastly, their Tem-
ules, Structures, and Palaces; their manner of worship, and recep-
tion of foreign Minifters and Embaffadors; with as much pleasing
variety as can rationally be expected. Any part of these may be
placed on the work, as the fancy and ingenuity of the undertaker
shall direct: yet I shall give a little light after what manner they
may be tranpofed.

Suppofe then you have a large piece of work, as a Table, or Ca-
binet; take one of the Prints which chiefly complies with your
humour, infer others also which may be most agreeable, yet give
variety too: borrow a part from one, a figure from another, birds
flying or flanding from a third; this you may practice until your
Cabinet be sufficiently charged: if after all this any thing be want-
ing, your judgment must order, beautifie, and correct. But ob-
serve this always, that if you would exactly imitate and copy out
the Japan, avoid filling and thronging your black with draught and
figure, for they, as you may remark, if ever you happen to view
any of the true Indian work, never croud up their ground with
many Figures, Houfes, or Trees, but allow a great space to little
work: And indeed tis much better, and more delightful; for then
the Black adds lufter to the Gold, and That by way of recumence
gives beautie to the Black.

But here an Objection may be start'd; That if a little work is
most natural, and according to the Pattern which the Indians have
let us, why have not I followed that Rule in my Draughts an-
nexed to this Book? To this I answer; That if I had so done, I
must have provided thrice the number of Plates, to shew the va-
riety that these have sufficiently done; not to mention a triple
charge that would have attended. Again, should these have been beau-
beautified with little work, I had then been liable to censure for
being niggardly of my Patterns, and depriving the practitioner of
choice and variety: But by what I have presented, I have securely
failed between this Scylla and Charybdis; have passed the Rock on
one hand, and the Gulph on the other; and, if I am not flattered,
have not only obtained the good liking of the Curious; but suffici-
ently supplied the wants of those who are great undertakers. Here
you may alter and correct, take out a piece from one, add a frag-
ment to the next, and make an entire garment compleat in all its
parts, though tis wrought out of never so many disagreeing Pat-
terns. Besides, I have not by this variety fixt a Ne plus ultra
to your fancy, but have left it free, and unconfined: I do advise,
that no one would oblige himself to keep close to the Copy, for
even the small Cutts will supply the place of a much larger Box
than is there express'd, and not injure or disfigure it. I do with
modesty and submission pretend not to confine, but lead and afflire
your fancy. Thus much in general terms; T'o detain you no lon-
ger on this large and pregnant Topick, but regularly now descend
to particulars, and instruct you how to work off some of the fore-
mentioned Draughts.

To work the First Draught.

This affords you ornaments for the tops and sides of little Boxes;
which, when traced out according to the directions already given,
must be done with gold, if you work in gum-water. Take your
gold-shell, and with your pencil fill some of the tops of your Houfes;
and those parts which you observe in your Print to be mark'd with
black lines, as the Doors, Windows, &c., afterwards the Sprigs,
Flowers, and Birds, all of them in a fair, small, but full Stroke;
now if you paint these latter things with colours, they may be va-
riously managed, with red, some others with blew, a third with
silver, until the whole be entirely compleat. If you think to
raise any of these, be sure to practic'd on these that lie first and
foremost, for which I do refer you to the Chapter of Raised work:
When you have thus far advanced, tis required that you should
proceed to Setting off, which I desire now to make my business
to inform you, as having never yet mentioned it; yet I shall at pre-
fent confine it only to that of Gum-water, for this is not the way
with Gold-lize, of which more properly hereafter. When the
leaves and tops of your Houfes are fairly laid in Flat-work; to
make the black and thinning veins of your leaves, the tiling of your
buildings, and foliage of garments, appear through your gold and
metals, as some of the Indian work does, exercise your Tracing-
pencil, breathing on your work with your mouth close to it; and
when moistened with your breath, streak or draw out the veins
and foliage of the figures, their hands, face, and parts so made in
their proper order. When your metal begins to dry, and will not
separate, force it to part again by breathing on it, for that moist-
ner.
ness will reduce it to obedience, which must be observed too in a moderate degree; for if you make it over-wet and damp, the tracing-iron is true will disjoin it, yet no sooner can it pass the place but it closes up, and reduces itself to its former amicable conjunction; as a Ship that ploughs and divides the Sea, makes a channel in an instant, but as that fails off the waters return, the breach is healed, and the place of its paffage is no more to be found. Too much moisture is therefore as great an inconvenience as none at all. Perhaps your work may be rough and unhandom before it is thoroughly dry, yet after that, a loft, new pencil by brushing will cast off that difguife, will command the loose rough particles to withdraw, and reprefent the Veinings and Hatchments in a smooth and pleafant drefs.

To set off Raised work with Black.

When your Raised work has been varnifhed and burnifhed, put Lampl-black into a Mufcle-shell, and with gum-water hardly wet it, for if you allow it too large a portion, you'll find it a difficult task to make it comply and incorporate: but when it is mixt, which you must perform with your brufh, then add as much water as will prepare and enable it, by the aid of a small well-pointed pencil, to draw fine black ftraeks. Thes must frame the lineaments and features of the Faces, the foldage of your raised Figures, the veins of Leaves, Seeds, the bodies of Trees, together with the black hatchments of your Flowers. If you would have any Rocks speckled, firft pafs them over with the faid black, and when dry, grant them two washes with the Securing-varnish; laftly, lay on the Speckles. One thing here deserves your obervation: If your good will and labour cannot be accepted, and your black, or whatsoever you set off with, will not be receiv'd; pafs over the Raised work with a Tripolee-cloth in a loft and gentle manner, left the Metals fhould be feduced, and forfake their apartment.

This manner of Setting off is more practifed than that with a Tracing-pencil, or breathing on it, not only for Raised but Flat-work too; for when your piece is dry, faltate it once with the Securing-varnish, after which take your black pencil, and employ it in hatching and veining at your own pleafure; other metals and colours defire the fame management: I will give you an instance; if a red flower were to be Set off with Silver, then must your Red be secured with varnish: and being firft supposed to dry, hatch and vein it with your Silver. Thes directions must be of force and confquence in all cafes where you defign to work one thing on another, whether colour upon metal, metal upon colour, or metal upon metal, without being guilty of false Heraldrie. Having adorned and Set off your piece, if it be Flat-work, you may make ufe of the varnish fpoken of in the 13th page of this Book, to secure your whole piece both draught and ground-work, which will endure polishing: but if for Raised-work, you must make ufe of the
The Art of Japanning, Varnishing, &c.

The other Securing-varnish, which is set down in the 12th page, and the reason is, because your Rais’d-work will not bear a polish as the other, but must only be secured, and cleared up. But here is to be noted, that this last varnish may be used either for Flat, or Raised-work, but the former is only proper for Flat. In working with Gum-water be ever vigilant and careful that your metals or colours be not too strong of gum, for it will utterly spoil their beautie and complexion; but when you have sufficiently mixed them in the beginning, fair water afterward may quench their drought. Look upon this as a general, unerring guide; let them be just so far encouraged with gum, as may oblige them to stick close to your work, and enable them to endure varnishing without coming off: If this should at last prove a repetition, you must pardon me; tis a business that I am very zalous for, and should be highly concerned to think of a miscarriage, in the last, ornamental part of the undertaking; and if you strictly examin it, you’ll find, if this is not new altogether, yet it may bear a second reading, as being a paraphrase, and explanation, of the former.

I intimated before, that the Rocks should be left of all treated of, because not to be finished till the rest were completed; only those few scattered sprigs, supposed to grow out of them, that they may not appear bald and naked, nor too full of em, lest they might confound the eye, and interrupt the shadow. Now if these Rocks are to be covered with metals, with your pencil lay Gold, Silver, or Copper, in a full body round the outward sfoaks, which were traced with your pencil, in breadth a quarter of an inch; prevent its being too wet; call for a large Goose-quill-pencil, cut off the point, making it flat and blunt at the end: With this touch or dab your Metal, then do the like to the black part of the Rock, whereby that may be sprinkled with some of the metal too, by little and little continue it until the whole be scattered over; yet these Specks should be thicker towards the sides and top, than in the middle. Other metals, artificial and adulterate, may be laid according to these directions, and may be dabb’d or workt with your middle finger as well as the Goose-pencil. Thus much may suffice for the first Print, work’d in Gum-water: I shall give some brief directions how to proceed in some few more; for by understanding those, you may safely adventure on any that remain.

Third Pattern.

This is a representation of Birds, which if you work with gold and colours, I advise that the body of the first Bird, that stands before the other, be done in gold, the wings with bright copper, and, when secured, let its breast be redded a little with vermilion, in that part of it which in the Print is darker than the rest. Then take your black shell, and beautifie the eye, and the touches about it with black; as also the feathering of the body and the back. Let
the wing be set off or feathered with silver, the long black stroaks in the feathers of it with black; the tail, legs, and bill with gold, but change the white lines in the tail for black. The bodies of the other Birds may be laied with adulterate, dirtie, dark copper, but the wings gold, set off the body with the same; the beart with touches of silver, the wing with black: Lastly, let the tail be bright copper, and feathered with white, the bill and feet gold. Next, cover the Flies body with gold, his wings with bright copper, hatchet or set off with silver, the body with black. Make your Bird on the seconde Box-lid with gold, feather and shadow it with bright gold; let the wing be with vermilion and Lamblack mixt, till tis become a dirtie red; feather it with gold, the quills with silver, the beak gold, and the legs vermilion. Let the other Bird be gold in the body, feathered about the wing (as you may see in the Pattern) with black; the wing natural copper, feathered with white or silver; let the Flies be gold, and let them off with black. Beautifie the first Bird, on the lid of the Patch-box, with bright or red copper; hatch it with silver, touch it about the eye and head with black; make the wing of gold, feathered with black; the feet and bill of the same metal. The other Bird behind it must have green gold in the body, feathered with silver; the wing gold as the other, hatchet with black. On the other lid make the Bird gold, the wings bright red copper, feathered with white and toucht with black. The sides of each box may be contrived after the same manner: the sprigs deserve all to be laid in gold, as the rocks with different metals, and shadowed, but allow the outward stroaks to be gold, not only as they confine, but as they adorn your work.

The Third Draught.

Before this piece can be adventured on, you are desired thus to make a paint or colour for the face and hands of the Figures. Grind white-lead finely on your Marble-stone; add as much Auripigment or Orpiment, as will give it a tawny colour; if you think it too lively and bright, alloy it with Lamblack, which may contribute to a swarthy complexion, and nearcst the Indian: but if you are inclined rather to a pleasant, flesh-like colour, a little vermilion or dragons-blood mixed with it, can to any degree oblige you. Now if you love variety of figures, you may use as many mixtures for their countenances; and distinguish the Master from the man, the Abigail from the Mistress by her tawnie skin. Lay then the garment of your Figure in the first powder-box-lid in bright red copper; on that part which covers the breast, and encircles the neck, paint vermilion; let the cap and stick be of gold; set off the foliage of his vesture with silver, and close to each silver-thread join other of black; set off the black with the same. Lastly, strike out the lineaments of the face, and shapes of the hands, with black also: Let his Lacquey, the boy that attends him, have a golden livery, the
the bundle under his arm red, with a cap of silver. Set off the garment and cap with black, his parcel with lines of silver. Order the Bird and Flie to be overlaid with gold, and set off with black. As for your Sprig, the great leaves must be green gold and pale copper, bordered with bright gold; your flowers vermillion, encompassed with silver, and fed with the same; garnish the small leaves and stooks with gold. The cover to the second Box should have its first figure attired in gold, where the black surrounds his neck, vermillion, the forepart of the cap the same, the hinder gold; his vest buttoned, looped, and draped with black; the red of the cap and neck edged with silver, the gold of the cap hatchet with black; the feet bright copper, set off with silver. The other gentleman his companion, that he may have as good apparel as his friend, let his cap before be gold, behind green gold; set off the first part with black, the latter with silver, the covering for his neck with the same metal; his long robe will require green gold, set off with bright gold; his feet of the same, set off with black. The Flie and Bird just as the former, the Sprig in like manner, except the feet, gold, set off with black. The Figure in the first Patch-box may be arrayed in bright copper, hatched or set off with silver; the cap and staff gold, the tree also. The figure on the other little box should have his upper coat vermillion, hatchet with silver; the under gold, set off with black; the stick, bird, and flie, gold; his feet, the colour of his face: The sprig, all gold, except the flowers, which may be red and silver, set off with black and silver. Let the sides be all gold, saving the rocks, which may be silver and copper.

Thus have I directed you in these methods of working colours; and how sparingly I have made use of them, for the least part of them is sufficient: and unless these are wrought clean, and with good judgment, it were more credit to omit, than insert 'em. But because some have a particular genius and inclination that way, I shall not make this Treatise incompleat as to forfake the treatise of them, and therefore to oblige universally the next Section is subjoined.

How to work in Colours and Gold the great Sprig in the XIIIth Print.

This has infinite variety, and by consequence will require the aid and assistance of very many colours, so that the Transparent ones may be here employed as well as the others.

First therefore trace out your design, and fill most part of the small work belonging to it, as the items and little leaves, with gold, passing by however a few of them, to be reserved for bright copper, green gold, or the like; added too in such fort, that they may grace and enliven the piece: for this the custom and fashion of the Japan-artificers, to fill frequently with dead metals, yet bind 'em in with gold. From these set upon the great leaves and flowers in the posture that they lie, and fill 'em by these directions, or any others
The Art of Japanning, Varnishing, &c.

others of the like kind. But by way of example; The first great flower next the rock, half covered by great Leaves lying before it, I would fill the feeded part with silver, the leaves with vermilion, and in setting off, work it in black Diamond-wire, and those little spots of black which lie lurking in the white, with bright red copper; then the part that is fill'd with red, I should bind in with silver, and vein it with the same. From this I come to the other on the right hand, and fill the feed of that flower with bright copper, the leaves with silver, and when I come to set off, border the feed with black, the inside with silver, compass in the leaves with gold, hatching them with black. From hence I march to that on the left, partly hid by a great leaf: the feed of this shall be green gold, its squares bright gold, the spots in the squares vermilion, its leaves with dark heavy copper, set off with silver. Next for the three flowers that lie somewhat above this: that in the middle I would do with green gold, the feed bright gold, squared with black: the other may be laid with silver, feeded with bright copper, hatched and squared with black. The last with vermilion, the feed with transparent green, and enclose them with vermilion, and hatch in the leaves with silver. From these I would proceed to the other flower, opposite to them on the right hand, somewhat larger; whose feed must be red, bound in and chequered with silver, covering the leaves with blew, hatchet and surrounded with gold: the little one above that with red, the feed with blew, set off with silver. From these we make our progress to the two great flowers above them: the first may be laid with transparent blew, bounded and worked with gold, the leaves covered with silver, and hatchet with vermilion: the feed of the second with dirty copper, set off and encircled with silver; the leaf of the said flower cloathed with deep bright red copper, hatchet with black. Next bufie your self in filling the single great flower above that, whose feed may be dirty gold, environed and squared with silver; the spots in the squares done with bright gold, that part of the leaves that is white changed for black, and with gold hide the black that lies in the white: the remaining part of the leaf may be laid with bright red copper, bounded with silver, and hatchet with the same. As for the flower next above that, I would lay the feed in transparent red, set it off with silver, border it with black; then make the leaves silver, and hatch it with black. Afterward, the three above this, I would work in the same manner with the lovermost three; but that above all, may have his feed bright copper, compass'd and set off with white; the leaves dirty copper, which might be hatchet and enclosed with white. Now remember, I beseech you, that although I have mentioned filling and setting off together, for the more easy apprehension of it, yet be constantly mindful to lay all your plain colours, before you think of setting them off; and the reason of it is this, because you are more ready to set off with one colour, before you undertake another, and your fancie is more quick
quick and ready to adorn and garnish every single flower and leaf. Now supposing the flowers filled, let us contrive what shall be the covering of the great leaves. But to be brief: Deck them with metals, generally such as green, dirtie gold; pale, muddy copper; yet intermix here and there blew and green transparent; bound and vein 'em with Such as give the greatest life; not wild, gawdy colours, so much as grave, modest, and delightful. I advise you sometimes to double your borders in the leaves, with the ground-black of the Box or Table left between, as the Print will inform you: And again, make all your veins, finishing lines, and thebrooks you let off with, fine, clean, even, and smooth. By this time I suppose, whoever shall survey these last pages, may imagine we have pleased our selves with fancies and Chimæras; that we have discours'd like men in a dream; nothing but Gold, Silver, and the richest colours can satiſfic our luxuriat fancies; nay, we pretend to have it in fuch plenty too, that Solomon himself, compared to us, was a beggar: By our talk we are Malleers of both Indies, Pațolus Sands, and the Mountains of Potufi should be our proper inheritance; for, like Midas, and the Philosophers fone, we turn every thing to Gold. Our Birds are fo splendidly arrayed, that all common ornaments are excluded; the fett Dyes fo universally overfread their wings, that you'd imagin they would outshine the Bird of Paradife. The clothing and livery of the Fields are mean and heavy, when compared to the Flowers our Art has produced, whose luftre is more radiant, more durable, and surprizing.

CHAP. X VI.

*To work in Gold-size the Twentieth Print of this Book.*

Since our Gentry have of late attained to the knowledge and distinction of true Japan, they are not fo fond of colours, but covet what is rightly imitated, rather than any work beside, tho' never fo finical and gawdy. The most excellent therefore in this Art copy out the Indian as exactly as may be in respect of Draught, Nature, and Likeness; in this performance then colours must be laid aside. Some variety of metals indeed may be admitted, but in a very flender proportion to that of gold, which is the Fac to-tum, the general ornament of right genuine Japan-work. This undertaking now in hand may be done with gold only; But I shall in the next Chapter choofe a Print, whereon perfect and corrupt metals may be laid. To begin therefore with that of Gold: Be ever cautious and exact when you trace or draw out your design in vermillion or gold; which being performed with an even hand, call for your gold-size, ready prepared for the draught; ufe a small...
convenient pencil, to mark in your size the outward lines, the boundaries of that rock, which in the twentieth Print you may perceive lies beyond the Buildings; and although you do begin here, you are not to fill it (either with metals or speckles,) until the other work is concluded; for, if you remember, we charged you before, to fill the Rocks in the last place. Again, if I may counsel you, begin with the remotest part, that which is farthest distant from you; for then you will not be liable to the inconvenience of rubbing, or defacing any thing whilst it is wet, with an unwelcome hand, or intruding elbow. Having therefore in short undertaken the farthest part first, work it just as the Print is; I mean, draw your gold-size on the black lines of the Print, and no where else; reserving the white for the black Japan or ground of your Table. But to explain it a little more: In all respects operate with your Size, as if you were to copy the Print on white paper with ink, or black Lead; only take care, that whilst you are busied in working one part, you fuffer not that already done with size to dry to that degree, that it will not receive and embrace your metal, but very often try the draught so lately made: if it is clammy, and sticks somewhat to your finger, but not so as to bring off any, then take high time with your leather to lay and rub on the gold-dust: if it clings to your finger so fast, as to come off with it, then know it is not sufficiently dry; if it is no way clammy, you may conclude it is too stubborn for the reception of the metal. This caveat, being rightly managed, set upon your drawing part again, and so continue, now making lines, then gilding them, until the whole be completed. If you find it a tedious, troublesome undertaking to draw the white, and pass over the black; or, on the contrary, to draw the black and omit the white on the tops of your houses, or foldage of figures, faces, or the like; then for your case overlay all those parts of your building or foldage &c with gold-size, and when your metal is laid on that, and is well dried, wash over with Securing-varnish those places only which you design to set off with black: which done, exercise your pencil in making those lines and divisions that are required to distinguish the parts of your house, as the Tiling, Draperie of garments, or any thing of the like nature. The reason why we enjoin you to walk with varnish, is not out of any filipition or jealousy that the size or metal will forfake its allotted feat, but because its surface is generally too smooth and greasy to admit of and unite with the black, unless reconciled by the mediation of the aforesaid varnish. What I have propounded is an example for any other Print, that you could wish or desire to accomplish in Gold-size: and indeed I had been very negligent, should I have permitted this noble subject to rest in silence and oblivion; this, which above all others presents us with the grandeur and majesty of Japan-work; our under-performances vanish and shrink away, when the Master-piece is exposed to view. Let the narrow-souled Miser hug and adore his bags
The Art of Japanning, Varnishing, &c.

Hags, and pray to the golden Calf that he has erected, I shall neither envy or comply with his idolatry; for I had rather live my House with that precious metal, than my Coffers.

CHAP. XVII.

To work in Gold-size the twentieth Print of this Book, with perfect or corrupt Metals.

This draught requires a greater variety of colours than any of the precedent, without which it were no mean or ordinary performance to drefs every figure in its proper habit, and equippe the attendance according to their respective qualities; but to shew what Art and Contrivance can effect, we have on purpose selected this Pattern, which was chiefly deigned for colours, and intend to alter the property, converting it to perfect and mixt metals: fo that if we overcome the most difficult, all meaner undertakings must by consequence yield obedience and submiffion. Were I therefore allowed to prefwite in this affair, I would in the first place overlay the canopy and curtains belonging to it with pure gold, then flower, and let them off with black: the two streamers or flags may be done in bright copper, faintly shadowed with powder-Tin, or dirtie silver; for the belt and brighteft Silver is to glaring a metal for black Japan, and very seldom if ever made use of, (yet I muft acknowledge I have seen several Cabinets of Raifed-work come from the Indies wrought altogether in Silver, but that is not authority sufficient for us to praftice it in Gold-work.) As for the King, his face and hands should not be of the ordinary hue with inferior mortals; Gold belt becomes his Majefly's countenance, his eyes and beard black, his cap green gold fet off with bright gold; his body may be cloathed in bright red copper, shadowed with black; the table-cloth covered with green gold, shadowed or fet off with bright. The figure kneeling by him, should have his up-er garment done in dirtie gold, shadowed faintly with dirtie fil-Ver, but his under in Powder-tin, hatcht with black; his feet with dirty copper. The bottom of the Throne, with the Afcnt, you are to lay with gold, and fet it off with black: The Ambaffa-dor firlt in rank approaching the throne, may be allowed the fame metal for his face with his Majefly, and fet off as his too with black; that on his fhoulders and flevies with bright red copper, shadowed with black; his prefent in his hand, gold, his cap green-gold, fet off with bright; his feather behind it bright copper, fet off with black; his body dirtie copper, shadowed faintly with dirty silver, or tin, yet flowered with bright gold; his feet bright copper, fet off with black. The figure immediately following him I should clad in gold; the cap may be bright copper, all shadowed or fet
fet off with black; his present in his hand, his shoes and girdle, bright copper fet off with black. The third Gentleman's face, hands, and feet, I would work in natural copper fet off with black, that on his head powder-tin shadowed with black; the covering on his shoulders green-gold, spotted and hatched with bright gold. His outward apparel should be a lay of bright copper, fet off with black; that in his hand, gold; his under-vestment the same, and hatch it with black. The last figure may have his hands, face, and feet, covered with gold, fet off with black; the upper-garment with green-gold, flowered and fet off with bright gold; the under, natural copper fet off with black; that on his shoulder with bright, red copper, shadowed also with black. The body of the tree can be done with dirty gold, shadowed and fet off as you see with bright gold; the leaves of the same. Lastly, the fruit, bright copper, and hatcht with black.

Thus may you work with Metals only, and vary it according to your fancy. And you may fet off your plain metals, when rubbed on Gold-fize, either with Metals mixed with Gum-water, or Gold-fize; that is, when your plain Metals are layed, and thoroughly dry, hatch or work in the Size for setting off, as you would do with Metals mixed with Gum-water. You may ufe which you please, but tis my opinion that Gold-fize is best.

I had rather see an Embaffy thus in Miniature, than take a voyage into China that I might really behold one: not that we have too richly attired his Majesty, and the Ambaffadors, or given them more magnificent habiliments than ever they bestowed upon themselves. Whether the King is defir'd to join in the league against the Tartar, or to stand Neuter, I cannot truly determine; but by those weighty reafons, the Golden Prefents, we conjecture that he may be bribed, and brought over to the party. The Agent seems very zealous in the businefs; what will be the influence and event, lies not in my power to foretell at prefent; nay, if you should have patience to tarry till the revolution of the Platonick year, when every thing shall be in the fame posture it is now, even then by confequence we fhould be ignorant of it. This indeed I can affure you, I have known these Politicians nigh ten years, and never saw them yet in any other manner than what the Picture represents; and do therefore imagin, that there are no hopes of an amicable and sudden conclusion.

We however fhall novy fix a period to this Treatife of Japan, as you may perceive by our giddy discourse, which seems to imply, that we have nothing more to say to the purpofe. Yet give me leave, kind Reader, to offer something before we take our formal leaves of this fubjeft. Many excellent Arts are buried in oblivion, which must certainly be ascribed to the neglect of the skillful, who never committed them to posterity by the useful convoy.
The Art of Japanning, Varnishing, &c.

veyance of Manuscript or the Pref.; Painting of Glafs, and making it malleable, may serve for infances of Arts that have miscarried, either through the laziness or ill nature of the Artists, who would not communicate their ingenuity to after-ages, or else through envy denied it a longer date than themselves, and foolishly resolved it should not survive them. Short-sighted ignorants! as if their fame and memory could die whilst their Arts thrived, or that their great Grand-sons should admire the invention, without entertaining a just esteem and deference for its Author. Yet I would not have you mistake me, and surmise, that I have made a circular Preamble, to hook my self into the circumference; for I proposed this Tract as a means to perpetuate my Art only. I must confess, I have too great an Esteem for this Pallas of mine, then in the least to slight or neglect it; and I think my self obliged to make as good a provifion for the issue of my Brain, as that of my Body; for the first is entirely my own, but I am forc'd to admit of a Partner in the generation of the latter. I shall never be folicitous for my self, and look upon Applause to be as empty and insignificant after death as before it; and am not in the least ambitious to live by another's breath, when I am deprived of my own. If I may be allowed to bestow a hearty Wilh, it must be for its Success, that it may flourish and be admired; that from these lines, as from the Serpents teeth which Cadmus sowed, may spring experienced Artists, that will invest it with splendor and reputation; yet with this difference from the parallel, that they may mutually confpire to establish and eternize it.
THE ART OF
GUILDING, LACKERING, &c.,
display’d.

CHAP. XVIII.

To guild any thing in Oyl, whereby it may safely be exposed to
the weather.

WE have hitherto uttered big and glorious words, hardly a
Page that has not echoed Gold and Silver; but if you’ll
pardon us, we will frankly and ingeniously confess, that the expres-
sions are as valuable as the things: for Brass-dust, and viler me-
tals have been thus disguised to counterfeit the more noble and ex-
cellent: yet it cannot be denied, but that they are such cunning
cheats as may almost impose upon the skilful and ingenious. And
this may be told in their behalf: That although they deceive the
eye, they neither pick or endanger the purle, which true gold
would do after a most profuse and unnecessary manner. Well then
by way of requital we shall cast away the vizor, and lay aside the
mimick drefs; for the Art now in hand will not admit of the for-
mer couzenage. Guilding accepts not of base materials, is wholly
unacquainted with dross or allay, and the finest unadulterate gold
is the only welcom and acceptable guest. I am sensible that the
Guilders on metals will quarrel at the name, who pretend, that
Guilding is a term appropriated to the working on Metals only;
but the dispute is equally trivial, and unreasonable: for if I over-
lay Wood or any other body with Gold, I cannot conceive how I
transgress the rules of common sense or English, if I say, I have
guilded such a wood; and I shall therefore acquiesce in this title,
until the frivolous Enquirers furnish me with a more natural and
proper appellation. However, since some of that profession have
upon this occasion disputed the title with me, though to no pur-
pose, to shew that I can and will be as good as my word, I’ll give
you their way of Guilding of Metals in full to end the dispute. But
to the busines in hand: I shall here instruct you in all things ne-
cessary for this way of Guilding, as Primer, Fat Oyl, and Gold-fige,
all which are to be gotten at the Colour-shops. Priming may be
afforded for 6d. the pound, the other two will cost each of them 3d the ounce: but because they are scarce commodities, and seldom to be met with very good, it is requisite for those who build much, to make it themselves, after this manner.

To make Priming.

Priming you may make of any colour that hath a body; as white-lead, brown or red Oker, and Umber, ground in oyl pretty light, but the Painters have the best conveniency for this composition; for its made of the scraping of their pots, the oldest skinny colours, and the cleaning or filth of their Pencils. All these being mixed, grind very well, put them into a canvas-bag that will hold a pint, and very strongly for this purpose. If the colour be too dark, it may be alter'd by adding a little white-lead. Being securely enclosed and tied up, press it between a pair of Screws, such as Apothecaries employ, now and then turning the bag, until all the fine primer be squeezed out, which should be received into a Gallipot, the skins and filth that remain are useless, and may therefore be thrown away. With this your piece must be very thinly primed over, and permitted to dry.

Fat Oyl

Is nothing else but Linseed oyl, managed thus. Put it into leaden vessels, shaped like dripping-pans, but so that the oyl may not be above an inch deep. Set them out exposed to the Sun for five or six months, until it becomes as thick as Turpentine; the longer it stands the more fat it will be, and by consequence the Gold will require a better gloss; if it arrive to the consistence of butter, that it may be almost cut with a knife, reserve it carefully, and as the best for use that can possibly be made.

Gold-Size in Oyl.

Provide the best yellow Oaker, see it very finely ground and thick with Linseed-oyle, which is something fat. This done confine them to a pipkin, and put on it some fat oyl, to keep it from skinning over: cover it with paper, or a bladder to guard it from dust and injury; lay it aside for your occasions. You may use it presently, and if you keep it seven years will come to no damage, but on the contrary be much better for your purpose. Should it happen that you might have old gold-size that is skinny, and yellow and brown Oaker in the same condition, grind them, put them up in a clean Canvas bag; press it between your Screw as your Primer was, until you have made a separation, and parted the good and serviceable from the bad and insignificant; a Gallipot is a fit receptacle for the first, and the dunghill for the latter. This sort of Gold-size is ready to serve your present and more urgent necessities; if you desire to have a piece extraordinary, I advise you to prime it thinly over once more, allowing it four or five days to dry, if your business will permit, if not, instead thereof Lacker over your work in the Sun.
The Art of Guilding, Lackering, &c.

Sun, or some such moderate heat, and then tis rightly prepared for the reception of the Gold-size.

How to mix, and lay on Gold-size.

Take of the best Gold-size, and of fat Oyl, an equal quantity, yet no more than your piece requires. Mix and incorporate them well together by the means of your Stone and Muller, and put them into a pot; procure a clean Bruih that has been formerly used, and with it dip it in the Size pafs over all the piece very thinly, jobbing and striking the point of the pencil into the hollow places of the carved work, that no place, crevice, or corner of your work may escape the salutation; for every part of your Frame or thing that hath not been partaker of the Gold-size, or touched with it, is not in a condition to embrace or receive your Leaf-gold; so that if care in this be wanting, your work, when it comes to be guilt, will be full of faults, and look feevily. Having thus done, remove it to a convenient place for twenty four hours, free and secure from dust; the longer it stands, the better glos your Gold or Silver will be adorned with, provided that it be tacky and clammy enough to hold your metals. Now to distinguish the true exact time when the Gold-size is fit to be guilded, breath on it; if your breath covers it over like a mist, tis evident that you may lay on your Gold; or otherwife, press your finger upon it somewhat hardly; and if you perceive tis fo drie, that it will neither discolour or stick to your finger, but is in some measure clammy, tacky, and unwilling to part with it, conclude tis in a good condition: should you attempt to guild before the Size is drie enough, that moisture will drown and deprive your Gold of that glos and luiter which it would acquire if skillfully performed; on the contrary, if the Size is over-drie, you are come too late, you have loft the opportunity, for it will not accept of the Gold. The firft mis-carriage of being too moif, is rectified by fuffering it to stand one day longer to drie; the latter, which is fo drie and stout, that it will not receive it, must be confined to a damp cellar for a night, and then without question will willingly accept of the golden Bribe.

Of laying on the Gold, and the Tools required for the buifiness.

You are defired in the firft place to furnish your felf with a Cufhion made of Leather stuff very even with Tow, and strained on a board 10 inches one way, and 14 the other. On this you are to cut the gold and silver with a thin, broad, ftarf, and fmoothered knife: To thefe, three or four Pencils of finer hair than ordinary; fome are of Swans-quills, and fold fingly for 6d. the Artists ufe alfo the end of a Squirrels tail spread abroad, and fiftened to a flat pencil-fpic, which is broad at one end, and fplit, juft like an houfe-painter’s Graining-tool, but fets; it ferves for taking up and laying on whole Leaves at a time, and is by them called a Pallet: Cotton is alfo requisite, and fome ufe nothing elfe. The Guilders
commonly border their Cushion at one end, and four or five inches down each side, with a strip of parchment two inches high, intending by this fence and bulwark to preserve their Gold from the assaults of Wind, and Air, which if moved never so gently, carries away this light body, which willingly complies with its uncertain motions. Experienced Artists frequently shake a whole book of Gold into this end of their Cushion at one time, and with their knife single out the leaves carefully, and either spread them whole on their work, or divide and cut 'em, as the bigness of the place requires: but I would not advise young beginners to pursue so far, as to operate this way, but venture upon a leaf or two at once, cutting it as above directed. Next, handle your Pencil or Cotton, breathing on it, with which touch and take up the gold; lay it on the place you designed it for, pressing it close with the said Pencil or Cotton. Thus proceed, until the whole be finished and overlaid; then cut some leaves into small pieces, which may cover several parts of the Frame that have escaped gilding. Having laid it aside for a day, call for a large fine hogs-hair-brush; with this jobb and beat over the work gently, that the gold may be pressed close, and compelled to retire into all the uneven, hollow parts of the Carving: Afterwards brush all the Leaf-gold into a sheet of paper for sale. Lastly, with fine soft, Shammy leather, as it were polished, and pass it over. These Rules being strictly observed, your undertaking will be artificially concluded; 'twill appear with a dazzling and unusual luster, and its beauty will be so durable, so well fortified against the injuries of wind and weather, that the attempts of many Ages will not be able to deface it.

To Launder in Oyl, such things as are to be exposed to the Weather.

In this I request you to observe the very method prescribed before for gilding, with this difference, That your Primer be more white than the last, which is effected by mixing a little White-lead, that has been grinded a long time, amongst the former Gold-size; farther considering, that your Silver-size ought not to be so drie as that of Gold, when the leaves are to be laid on. These two remarks being rightly observed, go on with your design in every particular as aforesaid, and you cannot possibly miscarry.

To prepare and guild Carved Frames in Oyl, that are not to be exposed abroad.

Provide a pipkkin, in it warm some Size pretty hot; bruise with your hand, and put in as much Whiting as will only make it of the same white colour. Size over your Frame once with it, then add more Whiting, until tis of a reasonable consistence and thickness: With this lay it over three or four times, as you find it deferves, granting it time to dry sufficiently between every turn. Now take a fine Fifh-skin or Dutch-rulhes, and smooth your Frame with 'em.
The Art of Guilding, Lackering, &c.

"em; when so done, you may with a rag, or finger dipt in water, smooth or, which is the same thing in other words, water-plain it to your mind; let it dry. After this, with a small quantity of strong Size, Gold-clear it; which is a term and name Artists make use of in this case to express themselves by, but is no more then if I had said in short, Size it over: when this is dried, Lacker over your piece by a gentle heat two several times. To conclude, lay on your Gold-size, and perform every thing required in the foregoing instructions.

CHAP. XIX.

To overlay Wood with burnish Gold and Silver.

In order to this work Parchment-size must be provided, which is made thus. Take two pounds of the cuttings or shavings of clean Parchment; the Scriveners vend it for 3d. the pound: wash and put it into a gallon of fair water, boil it to a jelly, then strain, and suffer it to cool, and you will find it a strong Size. This may be used in white Japan also, instead of 1fling-glas-size. When you intend to employ any part of it about the busines in hand, put a proportionable quantity into an earthen pipkin, make it very hot, remove it then from the fire, and scrape into it as much Whiting as may only colour it; mingle, and incorporate them well together with a clean Brush. With this whiten your Frame, jobbing and striking your Brush against it, that the Whiting may enter into every private corner and hollowness of its carved work; give it rest and leisure to dry. Melt Size again, and put in as much Whiting now as will render it in some degree thick; with it whiten over your Frame seven or eight times, or as you think best, striking your pencil as aforefaid; never forgetting this caution, to grant a through-drying time between every turn by the fire or Sun: but after the last, before it is quite dry, dip a clean brush in water, wet and smooth it over gently, and rush it smooth when dry if you find it necessary. In the next place, with an instrument called a Gouge, no broader than a straw, open the veins of the Carved work, which your Whiting has choakd and flopt up. Lastly, procure a fine rag wetted, with which and your finger gently with care smooth and water-plain it all over; and when it is dry, tis in a capacity to receive your gold-size; of which in the following Paragraph.

Of Gold and Silver-size for Burnishing.

Gold-size is the chief ingredient that is concerned in this sort of guilding, and tis a difficult task to find the true quantity of each distinct thing that is required to make up the composition; and the
reason of it is this, because you are compelled to vary and alter the proportions, as each season changes its qualities of moisture and dryness; for the Summer demands a stronger size than the Winter. The most experienced are uncertain, when they make the size, whether 'twill answer their intentions, and suffer them to burnish on it; therefore to know infallibly how 'twill endure, they lay some of it on the corner of a Frame, and cover it with Gold or Silver; now if it does not burnish well, but is rough, and inclined to scratch; add more greese or oil, yet avoid too large a quantity. And seeing this no easy matter to hit right, and nick the due required mixture, I shall lay down several ways to make it, which I have not only experienced myself, but are now practiced by some of the chief professors of it in London.

The best way to make Silver-size

Get in readiness fine Tobacco-pipe-clay; grind it very small; if you please, mix as much Lamblack as will turn it of a light ash-colour; add to these a small bit of candle-grease, grind 'em together extraordinary fine, granting a mixture of size and water; then try it as before directed.

The best Gold-size now in use.

Take of the best English and French Armoniack an equal quantity, grind them very finely on a Marble with water, then scrape into it a little candle-grease, incorporate and grind all well together. Again, mix a small quantity of parchment-size with a double proportion of water, and 'tis all concluded.

Another size for Silver.

Provide fine Tobacco-pipe-clay, grind a little black lead with it, cast in some Castile-soap, grind all of them together, mixing them with a weak size, as we taught you in the last account of making Silver-size.

A size for Gold or Silver.

Take two drams of Sallet-oil, one dram of white wax, put 'em into a clean gallipot, only dissolve them on the fire; to these, two drams of black Lead, and near a pound of Bole Armoniack, grind all very finely together, mixing with them also size and water. Remember that I desire you never to grind more gold or silver-size, than will serve your present necessities; if you transgress, and imagin 'twill be useful another time, believe me you'll be deceived when you come to make trial: more ample and full directions experience will dictate to you; what follows, may be advantageous and instructive in the preparation of your work. In order to gold-size it, If the subject you are to work on be a carved Frame, and you propose guilding it, take yellow Oaker, grind it finely with water, add a little weak size to bind it; when warm'd, colour over your Frame, pass by no part of it, permit it to dry leisurely.

To
The Art of Guilding, Lackering, &c.

To Gold-fize your Frame.

Employ either of the former Gold-sizes, yet I am rather inclined to the first; melt it, so that it be only blood-warm, stir it well with a fine brush; as for its condition, let it be somewhat thin. With this, size over the Frame twice, but touch not the hollow places or deepest parts of the Carving, where you cannot conveniently lay your Gold, for the yellow colour first laid on is nearer in colour to the gold, so that if in guilding you miss any, the fault will not be soon be discovered. Allow it a drying space of four or five hours, and try if the gold will burnish on it: if not, alter your gold-size, and do it over again, and when dry, thus cover it with.

To lay on Gold for Burnfiling

Having set your Frame on an Hafel, or fix it in some other place, in an upright posture that the water may run off, and not settle in any of the hollownesses, lay some leaves of Gold on your Cushion, which you are to hold in your left hand, with the Pallet and Pencil: also tis convenient to have a baron of water at your feet; as likewise dry Whiting, to rub your knife with some times, that the gold may not cling to it. All these being advantageously placed, and in readiness, advance forward, and after this manner set upon the work. Produce then a Swans-quill-pencil, or a larger tool of Camels-hair if the work require it: this being dipt in water, wet so much of your Frame as will take up three or four leaves, beginning at the lower end, ascending and guilding upwards, laying on whole leaves, or half, as your work calls for them, for your own interest contriving how you may bellow 'em without waste, which is the principal concernment a Guilder ought to be vigilant and circumpect in; and that darling-metal, which we foolish Mortals covet, may almost adore, is certainly too precious to be lavishly consumed, and unprofitably puff'd away. Then wet such another part of your work, and lay on your gold, with your Pencil or Cotton pressing it gently and close. By these regular steps and motions having guilded the two upright sides of your Frame, turn it, and proceed to operate after the same manner by the remaining upper and under part. If your work be sufficiently moist, you'll perceive how lovingly the gold will embrace it, hugging and clinging to it, like those inseparable friends, Iron and the Loadstone. I enjoy you, after the guilding of one side with whole, or half leaves, or large pieces, as your work requires, to make a strict enquiry, and review those many little spots and places, which, like so many Errata, have escaped the Pencil, and may thus be regulated: Cut some leaves of gold into small pieces, and with a smaller pencil than before wet the unguild points, and take up bits of gold proportion'd to the places that stand in need of it; this last performance we call, Faulting. All these things being done, let it stand till to morrow that time, and no longer, for
The Art of Guilding, Lackering, &c.

if you transgress, especially in the Summer, you'll find it will not burnish kindly, or recompense your trouble by giving you ample satisfaction.

To Burnish your Work.

A dog's tooth was formerly looked upon as the fittest instrument for this business; but of late Aggats and Pebbles are more highly esteemed, being formed into the same shapes, for they not only have a fine grain and greet, which conduces to, and heightens the lustre of the gold, but besides it makes a quicker dispatch, for by these means those narrow tedious strokes are prevented in this burnishing, and is performed with greater expedition. These Pebbles are each valued at 5s. I do therefore prefer and recommend 'em before dogs-teeth. Having burnished so much of your work as you design, leave the ground of your Carving untoucht, and some other parts as you think best, which being rough in respect of the other, fits off and beautifies the burnishing: that is, not burnished, must be matted or secured with Size, Seed-Lac-varnish, or Lacker, if you desire it deep-colour'd; and pray confine it to this part only, let not your untidily hand wander or transgress its bounds, and upon no account approach the burnishing. Then the work must be set off or repofled with Lacker, mixt in a gallipot with Dragons-blood and Saffron, or a colour called, Ornator; into which a fine pencil being dip't, with it touch the hollownesses of your Carving, the hollow veins of the leaves and foldage, if you imagin tis not deep enough, make it so by a repetition; some I know ufe Vermilion in Size, but I declare I am not reconciled to it, for tis not so pleafant and agreeable to the eye.

To lay on Silver-size.

Take Silver-size that's newly ground and mixt with weak Size; warm it as your Gold-size was, and with a clean pencil, of a bigness suitable to the work, size over the same once or twice. Let it dry, and if your Silver will burnish on it, tis sufficient; but on the contrary, if it will not, we advise you to an alteration. Next, wet your work, lay on your Leaf-Silver after the method for Gold directly, without any alteration, and burnish it all over.

Now before we part with this subject, I shall in brief lay down a few Rules to be observed by all Practitioners. And

1. Let your Parchment-size be somewhat stronger, and keep it no considerable time by you; for 'twill not then be serviceable.

2. Grind no more Gold or Silver-size, than what may supply your present necessities.

3. Preferve your work clean and free from dust, before and after tis gold-sized, and guilded, otherwise 'twill be full of scratches in burnishing.

Lastly, never attempt to whiten, gold-size, or burnish it, in the time of a hard frost; for your Whiting will be apt to peel off; the Gold
Gold and Silver-fize will fricë, in laying on, not to say any thing of other misfortunes that attend the unconstantable operation.

CHAP. XX.

To make good Paste, fit to mould or raise Carved work on Frames for Guilding.

I acknowledge this to be utterly useless, on supposition those persons who have Frames lived at London, or had any convenient commerce with, and conveyance from, that City; because Carved work is there done very cheap and well: but I confult the wants of those who cannot be supplied from thence, or any other place where Artists reside, who may afford them at reasonable rates. In this strait and exigency, therefore carve your Frames yourself; after this method. If you understand Modelling, or desire to make Models on which your Moulds shall be cast; take good, tough, well tempered Clay, and with your tools model and work out any fort of Carving which you fancy; lay it aside to drain in the shade, for either fire or Sun will crack it. When it is firmly dry and hard, and you intend to cast the Moulds on the Models, oyl your models over with Linseed oil; work the paste briskly between your hands, clap it on, and press it down close every where, that it may be a perfect mould in every part; and tis no sooner dried, than finished.

To make Paste.

Steep as much glew in water as will serve you at present, then boil it in the said liquor; make it stronger than any fize, yet something weaker than common melted glew: bruife and mix whitening very well with it, until it is as thick and consistant as paste or dough; knead it very stiffly, wrapping it up in a double cloath, in which it may lie and receive some heat from the fire; if you permit it to lie in the cold and harden, twill render it unfervicable.

To make a Mould of any Carved Frame, thereby to imitate it in Paste.

Take a piece of paste more or less according to the length or largeness of the leaves and flowers you take off; 'twould be idle and fruitless to take off the whole length, for you'll find one bunch of flowers, perhaps six or eight times in one side of a frame; so that one mould may serve all of that fort, provided they are artificially united and joined together. Work then the paste between your hands, clap it on that part of the frame which you design to take a mould off; let there be paste enough, that the back of the mould may be flat and even. While the mould is warm take it from the frame, and at the same instant with a weak glew fix it to a board that is larger than it self. Thus may you take off any other frame.
fort of Carving, not only from the inside and edge, but any part of your frame, glewing all your moulds on little boards, and giving them leisure to dry and harden.

Of placing Paffe or Carved work on Frames.

Every Joyner can make frames for this purpose, which sometimes are very plain mouldings, either half round, ojee or flat; for there may be some little hollowness and ojee, or what else you please, allowed of, on the sides of the passe-work. When your frames, passe, and moulds are ready, oyl the moulds very well with Linseed-oyl, striking the brush into every little corner, for this prevents the moulds sticking to the passe. Then use as much warm passe as will fill up the mould, work it again between your hands, and whilst it is thus warm, and in good temper, put it into the mould, pressing all parts with your thumbs; next, with a knife cut off the superfluous passe even with the top of the mould: turn out your newly fashioned carved work on your hand, and before it cools glew it, and the place is design'd for, with thin glew; clap it on your work in the very place you intend it shall always abide, pressing it gently. Then oyl your mould again, work your passe, cast and place it as before: this must be repeated, until the whole be accomplished, and the frame is to your content filled with carving. Grant it four or five days to dry in, after which time you may safely whiten it. On these sorts of frames you may guild in oyl, or burnifh, but to the latter it is chiefly accommodated.

CHAP. XXI.

Of Lackering.

Lackers are composed several ways, and differ as variously in their value and goodness, which admits of degrees, according to the method and materials out of which they are produced; yet they have common to them all in which they universally agree, the famous ingredients, Spirit of Wine, and Seed or Shell-lac-varnish; but their Colour and Tincture for all this differ extremely. Some boil their Lackers, whilst others (who are more in the right) are not beholding either to Fire or Sun. They who through ignorance dissolve it by fire, are in the first place to be excused, as also when they cannot raise to the price of good Spirits, strong enough to dissolve the Seed or Shell-lac without fire; but because some may be willing to save charges, and others desire indifferent Lackers only, take along with you directions for them both.
The Art of Guilding, Lackering, &c.

To make common Lacker.

Take one quart of Spirit, put it into a Pottle-bottle; of Shell-Lace eight ounces, beaten small enough to enter the bottle; shake 'em well together; having stood till quite dissolved, strain it, and reduce to powder a small quantity of Sanguis Draconis, which with a little Turpentine tied up in a rag put into it, grant it a days continuance in that posture, at your leisure hours shaking it. You may alter the colour, heighten or abate it, by adding or diminishing the quantity of the two latter ingredients.

Another sort of Lacker.

Use the same quantity of Spirit of Wine and Shell-Lace as before; when dissolved, strain it; but, to give it a tincture, instead of common Dragons-blood and Turpentine, employ a very little Sanguis Draconis in drops, and Saffron dried; which bruife, and cloath with a piece of linen, and manage it as the other, by putting it into the vessel. If you desire the Lacker of a deeper or more copperish colour, add more Sanguis; if the contrary, Saffron. These being shaken well, keep close stop'd for your designs.

To make the best sort of Lacker now used by the Guilders.

Some use Shell-lace-varnish only for this Lacker, but Seed-lace is much better, the composition of which you are taught in the 8th page. Take therefore of this seed-lace-varnish, a quantity answerable to the Lacker, which give a tincture to after this manner. Take the colour called Ornator, ground and reduced to a very fine dry powder; mix it and some of the varnish in a gallipot, stir and dissolve it over a gentle fire; after this confine 'em to a viol close-ly stop'd. Take likewise three or four ounces of Gambogium, which I would have bruised, dissolved on the fire, and kept in a vial as the other. To a quart of this varnish, if you please, two penniworth of Saffron dried and bruised may be added; to these, five or six spoon-fulls of the Ornator, and a double portion of Gambogium-varnish: being shaken well together, try it on a little bit of silver, or a small frame; if it appears too yellow, afford more from your Ornator, but if too red, from your Gambogium vial: by these contrivances you may continue the mixture until you arrive at the true golden colour, which is the only excellence we design and aim at.

To make a Lacker, that may be used without Fire or Sun.

To a quart of the aforesaid Lacker allow 2 penniworth of Venice Turpentine; mix and incorporate them very well. With this you may lacker any thing in the open Air, and although it may look
The Art of Guilding, Lackering, &c.

Lackering is a process that makes dull and misty surfaces shine after every lackering, that furtive, that seeming discouragement, will quickly vanish; that thin cloudy vapour, will be dissipated by its sudden, and piercing lustre.

To lacker Oyl, Size, or Burnish Silver.

Let your Frame or work be warmed before you lacker it, and when some of your Lackers is poured into a large Gallipot, with a fine large Brush, that does not drop any of its hairs, made of Hogs or Camel's-hair, keep quick and paus over the piece, carefully contriving to miss no part, or to repass another that has been already lackered; but in a manner observe the same rules here, that are given for Japan, yet with these exceptions in lackering Carved work; for then you must be quick, and strike or jobb your brush, thereby to cover the deep parts also: Be sure to lay it thin and even, and presently warm it by the fire whilst it looks bright, for by these means you may lacker it again in a quarter of an hour, warming it before and after the operation. If two or three varnishings will not produce a colour deep enough, oblige it with a fourth; but remember, if you should carelessly do it too deep, all assistance will be insignificant, and no remedy whatsoever will avail you.

To make Lackering seem like Burnish Gold.

If you are careful and neat in burnishing your silver, and have graced your Lackers with a true gold-colour, have with an even hand laid it no thicker in one place than another; then Matt and Repoffe it, as you do burnish gold; and unless narrowly surveyed, twill put a fallacy upon and deceive curious, discerning eyes. Matting is only the ground-work of your Carving altered, or varnishing it deeper and more dull than the other part of the Frame: Repolling is done with Lackers and Ornator, (which latter the Drugfiers fell at 4d the ounce,) with these mixt, touch and deepen all the hollow deep places and veins of your work; for it adorns and sets it off admirably well, by its colour and reflection.

CHAP. XXII.

Of Guilding Metals.

I Acquainted you before with a controversy between the Guilders, concerning the Terms of Art, who denied the name of Guilding to that of Wood, and confined it to Metals only: upon which account we promised you to treat of the latter too, and thereby comprehend both; although this no question but one laics as just a claim to that title as the other. They are certainly fine inventions, that serve to please us with the shadow, when the substance can-
can't be purchased. We are all of us great admirers of Gold, and by consequence must be enamoured with Guilding, which is so nearly related to it. For Guilding is Gold in Miniature, with which as with a golden Ray, we beautify and adorn our viler Metals. Its preparation therefore must first be discovered, before we can proceed to the use and performance.

To prepare Gold.

Take Leaf, or fine Ducket-gold, which is more excellent for this use, of either what quantity you please; but be sure that the Ducket be beaten very thin: put the gold, and as much quick-silver as will just cover it, into a gallipot. Let them stand half an hour, preferably after the mixture stirring them with a stick. This time being expired, strain 'em through a piece of leather, squeezing with your hand, till you have brought out as much quick-silver as will be forc'd through by all your industry. Now that which remains in the leather looks more like silver than gold, yet ris that, and that alone which must be employed in the succeeding operation.

To guild Silver, Copper, Brass, or Prince-metal.

Whatever you design for guilding, should be first well scrubbed with a Wier-brush, fold by the Iron-mongers. Wet the piece with water or beer, and continue scrubbing and wetting it, until all filth and dirtines be fetcht off, that the two metals may more closely hug and embrace each other. This being cleans'd, make ready quick-silver, by mixing it with a very small quantity of Aqua fortis in a vial, which should always stand by you; three or four drops only of Aqua fortis, is sufficient I assure you for an ounce of quick-silver. With this quicken your work, that is, with your finger or a fine rag rub this mixture on your metal, till tis all over-silvered or touched with the said quick-silver. This done, call for your gold formerly prepared, and with an iron-tool or little knife fit for the purpose, spread or overlay the whole work, being careful to mis no part, under the penalty of doing that place over again, after you have given it an heat over a fire, which you must do when the gold is laid, to compel the Mercury or quicksilver to evaporate and fly away, leaving the gold fixed and adhering close to the piece. But before you give it a through heat, let it have two or three little heats, that you may with a hair-brush, like that of a comb, dab and spread your gold, which by the little warmth you gave it, makes the quicksilver also more ready to spread. After these two or three visits made to the fire, give it the thorough-heat at first mentioned: then take it from the fire, and with a scrub-brush, that has never been touched with quicksilver, clean it, as you did in the beginning. Now, if you perceive any spot of quicksilver untoucht, you must lay your gold upon it again: when tis cleans with the scratch-brush, you may after this manner heighten its colour, if you think convenient.

Take
Take of Salt, Argal, and Brimstone, an equal quantity; mix them with as much fair water as will cover the thing when put into it; boil them over the fire, and having tied your guided work to a string, put it into the boiling liquor for a little space, looking on it every minute, and when it has acquired a colour that pleases you, dip it in cold water, and the whole is finished. But still if you would have the work more rich and lafting, you may again quicken it with quicksilver and aqua fortis, and guild it over again after the former method, and repeat it so often, if you pleafe, till your gold lies as thick as your nail upon the metal.

Another way to guild Silver, Brass, or Princes-metal.

Firft, brush over your silver with Aqua fortis, then quicken your work with Mercury as before taught. Let your gold be beaten thin, and put into a Crucible, with just so much quicksilver as will cover it, and let it stand till it begin to blubber: then strain it through a piece of leather as before, and the quicksilver will go through and leave your gold, but discoloured, as hath been said; then lay it on with an iron-tool, and in every thing do as you were taught in the other guilding.

Another way to heat, or heighten, the Colour of your Gold.

Take Sal Armoniack, Salt-petre, Sandiver, Verdigreece, white and green Vitriol, grind them with white-wine vinegar, which lay all over your work; then lay it on a fire, and give it a small heat that may make it smock, and then take it off and quench it in urine.

To take off Gold from any guile Plate, without the damage of one, or loss of the other.

Put as much Sal Armoniack, finely beaten, into Aqua fortis, as will make it thick like a Paste; spread your Plate all over with it, put it into the fire, give it a thorough heat, Neal it, or make it red hot; then quench it in fair water, and with a scrub-brush scratch and scrub the Plate very well, which will fetch off all the gold into the water. After a little time standing quietly, pour off your water, and the gold will be to your satisfaction found at the bottom; if all the gold be not come off, do the same again. As for cleaning this plate, or any other, which we call, Boiling of silver, firft, make your plate red hot, let it stand till it is cold; then mix Argal and Salt with water, when it boils, put in your plate, keeping it there for a quarter of an hour: take it out, and when washed and rimmed in fair water, you'll perceive by its beauty that it is sufficiently changed.

To Silver-over Brass or Copper, as the Clockmakers do their Dial-plates.

Having Leaf or burnt-silver in readines, put it into as much Aqua fortis as will cover it; after an hours standing pour off the Aqua fortis as clean as may be from the silver; wash the silver three
three or four times with water, let it dry; and then mix it with one part of fine Argal to three of silver, with a little fair water. When you make use of it, rub it on the work with a cork, until the silvered, and lie as fair as you could wish. Next, dry it well with a linnen cloth; and having made it warm, wash it over three or four times with the best white varnish, spoken of in this book; and it will not fail to secure it from Tamifling, and other injuries.

To guild Iron, Brass, or Steel, with Leaf-gold or Silver...

If you are to guild Brass or old Iron, you must cleanse it very well with a Scratch-brush, before you hatch or guild on it; but for new Iron or Steel, after you have filed it very smooth, take a hatching-knife, (which is only a knife with a short blade and long handle,) and hatch your work all over neatly; then give it an heat, whilst it looks blew, on a charcoal fire, from whence take it and lay on your gold or silver, and with a sanguine-stone burnish it down a little; then give it the same heat and burnish it all over. Thus may you repeat three or four, or half a dozen, or a dozen times if you please, still observing to give it the same heat before and after you lay on your gold or silver, and burnish it. This leaf-gold and silver is much thicker than the other, and four times as dear.

To refine Silver.

Take Silver, be it never so coarse, and melt it in a melting-pot; then cast it into water, to make it hollow; after it is cold take it out and dry it, mixing one ounce of Salt-petre to a penny-weight of Antimony, (so proportionably greater quantities, if you have occasion.) Thee with your Silver confine again to a melting-pot, covering that with another, very closely luting them together with loam, made of clay and horfe-dung. The two pots being thus cemented, put 'em into the fire, and give them a very strong heat, after which remove them to a cooling place. Break the pot when cold, and you'll perceive the silver fine at the bottom, but the scorio and drofs on the upper part like a cinder. Copper may be separated from Gold after the same manner.

To separate Gold and Silver, when incorporated, with Aqua fortis.

Take as much Aqua fortis duplex, as will something more than cover your metal, in a strong vial or parting-glass. Put it on sand over a gentle fire at first, with the glass open and unstop; for if it is closed twill break in pieces, as may also a fierce fire at the beginning: by degrees therefore increase its heat, till you make the Aqua fortis simmer and boil; continue so doing, till your metal be dissolved. This done, pour the Aqua fortis gently into water; the silver will invisibly go along with it, but the gold remain at the bottom of the glass; which gold, when well washed with water,
water, you may melt down, or preferve for guilding metals, by mixing it with quicksilver, and training the latter through lea-
ther, as you were instructed by Leaf and Duckett-gold.

Now to reduce the silver into its former body which appears to be a water, and so would remain many years, unlefs you take this method for its alteration; pour the said water (wherein your silver is floating like indiscernable Atoms) into a copper vessel, if in any other, put in copper-plates; and immediately all the silver will repair to the copper, like an army to their posts at beat of drum, so that in two or three hours time (that small parcel of silver, which hath been separated into parts more innumerable than the Turks army will be this Campagne) you'll find all hanging and clinging so lovingly to the copper, and as loth to part as we from our Mistresses, tho' they're sometimes more unconstant to us than the silver is to the copper, for no other metal can tempt it to the same compliance. The same silver so gathered you may use for silvering any metal, doing with it as is here taught of the gold, or instead of leaf or burnt silver dissolved in Aqua fortis, as was before said in Clockmakers silvering.
Directions in Painting MEZZOTINTO PRINTS on GLASS, or without it.

CHAP. XXIII.

This most ingenious way of Painting justly claims applause and admiration, if skill and dexterity are called to the performance: Where these two combine, beauty and perfection must dance attendance. Tis a pleasant, inspiring Art; which, under a pretty disguise betrays us into a mistake: We think a piece of Limning lies before us, but mere scrutiny will evince, that tis Mezzo-tinto at the bottom; Who can be displeased to be so innocently deluded, and enamoured at the same time? Tis female policy at once to ravish and deceive the eyes, and we not only care for the cheat, but are in love with the impostor too. This manner of Painting is look upon to be the Womans more peculiar province, and the Ladies are almost the only pretenders; yet with modesty and submission I may adventure to affirm, that I have not had the good fortune to meet with one of an hundred, that had an excellent command of the Pencil, or could devouredly be called a Mistress of this Art; yet tis certainly no unadulterated task to arrive to a great height in it: but we are overstockt with no lets conceited than ignorant Teachers, well qualified to deface a Print, and spoil the colours, who abuse those young Ladies that desire instructions, persuading 'em to the damage of their purses, and losst of their time to attempt that which they are not able so much as to attempt em in. This is a sufficient inducement to persuade myself, that these Rules will be acceptable; tho I know very well that I have raised a discourse on a subject with which the world is very well acquainted, yet by way of requital I shall make greater discoveries than the famous Mistresses of it ever pretended to communicate; in a word, I promise to display it in its perfection.

I conceive tis requisite to advise you, first, in the election of Prints, Frames, and Glass; of each in their order. Mezzo-tinto Prints are to be preferred before all others, being more fit and suitable for Painting than those that are engraved, for in these, all the strokes of the Graver are plainly visible; but the other, if done with a neat and careful hand, on a good, fine-grounded print, can hardly be distinguished from Limning. Consider, that some of these Prints are of a coarse ground, others of a fine: the first are discernible, for they seem to be rough, and work as if they were with the pricks of a Pen; but the latter hath soft and fine shades, like a piece neatly wrought in Indian ink, or a picture in black and white. Ob-
Directions in Painting

Observe farther what paper they are drawn upon; for if it be too thick, which you may foresee by wetting a corner of it with water or your tongue, and it pafs not through the paper presently, then conclude tis not for your purpose; but on the contrary, the thin and spongy paper must be elected: Their value is enhanced by the different size and goodness of each Print; some may be afforded for six pence or a shilling, others for 18d. or more.

Your Glasses ought to be thin, white, and well polished, such as is made for Looking-glasses. All blewifti, red, green, and window-glass, cannot be allowed of here; you must altogether despise and calibrate it; for if you paint on either of these, especially window-glass, your colours can never appear fair and beautiful.

Your Frames for glasses-painting are usually made of stained Pear-tree, with narrow mouldings for little pieces, which increase in breadth, as the size of your picture does in largeness; they are made with Rabets, and are afforded for 6s., and 12 pence, or more, according to their several dimensions.

Another sort of frames I recommend to you, most proper for those Prints which you paint without glasses, called Straining-frames: If you desire to have them Carved, Guilded, or black, order them to be made flat, and even, without a Rabet on the backside, half an inch less than the edge of the Cuff, every way; which is apt to rend when it undergoes the trial of straining. This mischance is occasioned by the sharp edge of the Plate, which almost cuts the paper when tis printed: If you approve of black Frames, command the Frame-maker to work them half round with Pear-tree; would you stain, or Japan them, guild or raise their carved work; this Book will sufficiently inform and direct you. Thus much of these things in particular; I shall now proceed to give a catalogue of such Colours as may be affllicant to you in this business, together with the Oyls, and their several prices; as also directions to make drying Oyl, and various sorts of Varnish for Painting. And first, the names of your colours, and their value, as they are commonly sold ready-prepared, take in the very order that they are placed on your Pallet.

Flake White, finely ground in Nut-oyl, is sold at 2s. the pound.
White-lead, ground in the same oyl, is. per pound.

Yellow and brown Oaker, finely ground in Linseed oyl, is vended for 3d. the ounce.
Yellow or Dutch Pink may be afforded, when ground, at the same rate.

Brown or glasing-Pink is indeed very dear, the bigness of a Nutmeg grinded will stand you in 6d.

Fine Lake will cost as much.

Light and brown Red, are only yellow and brown Oaker burnt; tis 3d. the ounce ready ground.

Italian Terravert is not much used in this Painting, though very much in all others; tis dearer sometimes than at others.

Umber
Observe, indifferent finer other fome dir you or if this for Carramine, of have as. or to this for 3d. the Ounce; indifferent brown Pink, and Lake, for the same value; but that which is more pure and fine, is 1s. 6d. 2s. and 2s. 6d. or more, as they excell in goodnes.

Some Colours are in powder, which you mift of necessity have by you, and should mix and temper on your Pallet, as you shall have occasion to use them.

The firft is Vermilion, ufually fold at 4d. the Ounce.

Carramine, being the finest and moft excellent Red, is sometimes vended for 1l. the Ounce.

For Blews, the belt fine Smalt is to be bought for 4 or 5s. the pound.

Blew Bice, uffeful only in making green colours, may be gotten for 4d. or 6d. an Ounce.

Ultramarine, the richest bleed in the world, bears several prices: the deepest and belt will cost 6 or 7 Guinea's, but then it muft be extraordinary fine; other forts are expo'd for 3 or 4l. the Ounce, which is very good too, and fit for this ufe; fome again for 20s. the fame quantity, and may ferve for Painting, but tis too coarfe for glazing.

Yellow and pale Mafficott, which is fineft, free from greet, with the brighteft colour, is the belt. If it prove coarfe, grind or wash it a little on a clean flone; tis fold for 2d. the Ounce.

Red Orpiment you muft mix with drying Oyl; this too is afforded for 2d. the Ounce.

Thefe are the Colours ufeful in Painting, with which you may exactly imitate and hit any colour whatfoever, by different ways and methods of mixture. Their price also I have given you, if you buy them in small parcels; but if you furnifh your felf with greater quantities at one time, you'll find the purchafe more cheap, and eafe. Observe, that fix of thefe are transparent or glazing colours, viz. Brown Pink, fine Lake, Carramine, fine Smalt, Ultramarine, and Distilled Verdegrees.

To wash, or make any of the Powders very fine.

You muft have four or five large Wine-glaflces by you, and two or three quarts of clear water. Fill one of your glaces with it; put in half an Ounce, or as much of your colour as you intend to waft; stir it well about with your knife, permit it to stand no longer than while you could count or tell forty; for in this short space of time all the coarfe will sink and fettle to the bottom, the finer
Directions in Painting

finer remains floating in the water, which convey and pour off into another glass, leaving the coarser part behind. Let the vessel, with the fine colour and water, stand till next day, by which time that also will settle to the bottom of the water. This being poured off, take out the colour; place it on a clean smooth Chalkflour, to soak and drink up the water; and when it is dry, paper it up for your business.

Of Oyls.

It remains, that to this account of Colours, we subjoin that of Oyls, which must be serviceable to us in the Art of Painting.

The first of these is Linseed Oyl, sold at 8d. the quart.

Nut-Oyl, to be purchased at 16 or 18d. the like quantity.

Oyl of Turpentine is afforded for less than 8d. the pound.

Drying-Oyl, will stand you in 2d. an Ounce at the Colour-shops, and Fine-varnish 3d. which in my opinion is too dear; and therefore, if you'll give your self the trouble, I'll be at the pains to instruct you, how to make either fort.

To make the best Drying-Oyl.

Mix a little Letharge of Gold with Linseed-Oyl for a quarter of an hour boil it; if you'd have it stronger, continue boiling it, but not too much neither, lest it prove over-thick and unserviceable.

Another more ordinary.

Bruise Umber and Red-lead to powder, mix 'em with Linseed-oyl, and for boiling follow the directions foregoing. When this Oyl has stood a day or two, and you find a skin over it, know then for certain it is at your service.

To make Varnishes for these Prints, or Pictures in oyl.

Put an Ounce of Venice-Turpentine into an earthen pot, place it over a fire, and when dissolved and melted thin, add to it two ounces of oyl of Turpentine; as soon as they boil take off the pot, and when the varnish is cool, keep it in a glass-bottle. This and all other varnishes ought to be stopp'd close, and secured from the approaches and damage of the Air. With this you may varnish your Prints on glass or others, to render them transparent; this is what the Shops sell for fine varnish; should your varnish be too thick, relieve it by an addition of Oyl of Turpentine.

Another more excellent Varnish either for Pictures in oyl, or making Prints transparent.

Inclove six ounces of the clearest, white, well-pick'd Maftick finely powdered, in a bottle with sixteen ounces of oyl of Turpentine; stop and shake them well together, till they are incorporated. Then hang the bottle in a vessel of water, but not so deep as to touch the bottom; boil the water for half an hour, in which space you must take
Mezzotinto-Prints.

Having at large treated of the Colours, Oyls, and other materials required in this work; I proceed to instruct you how the Prints themselves must be laid on Glass. First, therefore, let your Prints be steeped in warm water flat-ways; for four or five hours, or more, if the paper be thick: provide then a thin pliable knife, with it spread Venice-Turpentine thin and even over the glass, and with your finger dab and touch it all over, that the Turpentine may appear rough. Next, take the Print out of the water, lay it on a clean Napkin very evenly, and with another press every part of it lightly, to suck and drink up the water of it; afterwards lay the print on the glass by degrees, beginning at one end, frowning outwards that part which is fastening to the glass, that between it and the Print no wind or water may lurk and hide it self, which you must be careful of, and never fail to stroke out. Then wet the backside of the print, and with a bit of sponge or your finger rub it over lightly, and the paper will role off by degrees; but be careful, and avoid rubbing holes, especially in the lights, which are most tender: and when you have peeled it so long, that the Print appears transparent on the backside, let it dry for two hours; next, varnish it over with Mastic or Turpentine-varnish four or five times, or so often, till you may clearly see through it. After a nights time for drying, you may work on it.

To lay Prints, either engraved, or Mezzo-tint’d, in such manner, that you may role off all the paper, and leave the shadow behind.

Soak the Print in water, dry it with a cloath, spread on the glass oyl of Mastic and some Turpentine, and lay on the print upon it, exactly as before. When its almost dry, brush off the paper with a brush, and you‘ll find none but the inky, shadowed part remain: then do this as the former with Mastic-varnish, which preferve dry and free from dust, until you‘re at leisure to paint upon it.

To prepare Prints without glass, or ‘framing-frames.

When your prints are steeped sufficiently in water, lay them on a smooth, wet Table, with the print-side downwards, and rub‘em thin as before for glass. Next, with common paste, do the back-side of your frame, and paste on your print while wet: give it leisure.
Directions in Painting

ture to dry, and then varnish it on both sides four or five times with Malfick or Turpentine-varnish; until it is so transparent, that you may see the Picture as plain on the back as foreside. Lastly, allow it a day or two for drying.

Of the posture and position of the Prints, and those that paint them.

I may now very reasonably suppose, that all things are in readiness, and that nothing may hinder us from setting about the work in earnest. Most Ladies that have practised this Art have made use of an uncafe posture for themselves, and a disadvantageous situation for their piece: for they generally stand to it when the windows are high, against which they place the Print; but whosoever stands, cannot so steadily move the hand and pencil as the person that lies down. I advise you therefore to a Table Hafel, very like to, and not improperly called, a Reading-desk; only with this difference, That where the Panel or back-board for the book is, there our Painting-desk may be all open, with three or four wiers pendant-wise, to keep the picture from falling through, and a narrow ledge at the bottom to support it. Befide these, I would have little holes made equally distant on both sides of the Desk, as is remarkable in Painters Hafels, that by pegs or pins, and a narrow ledge laid upon them, I may raise my Picture higher or lower, as it best suits with my convenience. Being thus fixt, lay a sheet of very white paper behind the picture on the table, and you'll find it much better, and more conveniently placed than against the window.

How to paint a Mezzo-tinto-Landskip on Glass, or otherwise.

The first thing to be attempted in this work, whether Landskip or others, is Glazing all those places that require it; and if you desire they should lie thin, and dry quickly, (as they ought to do,) mix varnish when you lay them on, and in four hours time they'll be ready for the reception of other colours. In Landskip, you should first glaze the nearest and great trees, and ground 'em with brown Pink, or, if you fancy them greener, add distilled Verdegras. The trees, that are to appear with a lively, beautiful green, as also the leaves and weeds, that are in some pictures, must be glazed with Dutch-Pink, and distilled Verdegras; the trees farther off, with Verdegras alone; the hills, mountains, and trees, at the greatest distance of all, remember to glaze with fine Smalt, a little Lake, and Verdegras, all thinly mixt with varnish. As for the Sky, although several Miftrelles practice and teach the cutting of it out from the picture, and painting it on the glass, I do by no means allow of it, for it agrees not with the eye, but makes that part which should seem more distant, appear too nigh and before the rest; in a word, it spoils and disparages the whole piece. I cannot suggest to my self any reason for this foolish contrivance, unless
a sense of their inabilities to paint them beautifully, obliges them to commit so great an absurdity. Take then Ultramarine, or, for want of that, fine Smalt; mix it thin with varnish, and glaze it over two or three times with a clean large Pencil, and a very swift stroke; for if you're tedious, it will dry too fast, that you cannot possibly lay it even. If the Landskip be adorned with Figures, Buildings, Rocks, Ruins, or the like, they require finishing first of all. The mixture of colours for these things consists chiefly of white, black, and yellow, sometimes a tincture of red; but the management and composition of them I leave to your inclination, fancy, and experience: yet I would have you consider, that all your Colours for this sort of Painting ought to be extraordinary light. Now to finish the Trees, Ground, and Sky, and the rest of the picture, begin as before with the greatest or nearest trees, and with yellow Pink and white, paint over the lightest leaves; but with a darker colour of Pink, and a little Smalt, do neatly over the darker and outward leaves with a small pencil dipt in varnish. Those trees you would have beautiful, paint with a mixture of yellow Masticott, Verdegreas, and white; the darker parts with Pink, Verdegreas, and white; as those trees also which you glazed with Verdegreas only, they being mixt very light with white. But to finish the skie and foreskip; if any clouds appear, touch them with varnish and light colour, made of white, yellow Oaker, and Lake: With these likewise touch the lightest parts of hills, and towns, at the remotest distance; then mix Smalt and White as light as you can conveniently, and paint over the skie; add to these a tincture of Lake, and do over the darker clouds: Let your colours lie thin, and even; if the whole be finished, grant it time to dry in. If you would have your Picture look more strong, brisk, and lively, let it against the light, or on the Hatel as before; and although it is painted all over, you may perceive the shadows and lights through it; if not, what you painted before will guide you. Paint then your skie and foreskip with the same but lighter colours than before, and so every thing else respectively.

CHAP. XXV.

To Paint a piece of figures, as Men, Women, &c.

In painting a Face, the first thing required is, if there are any deep shadows, to glaze and touch them thinly with Lake, brown Pink, and Varnish; also the white speck and black ball, or light of the eye, as the Print will direct you; the round white ball of a convenient colour too. If you make the lips of a delicate red, glaze them with Carramine, or Lake: For the rest of the face, begin with the dark side, and paint the shadows with a colour more
Directions

red than ordinary, for which Vermilion, yellow Pink, and white, are most proper; where note, that all varnish is forbid in painting flesh-colours, except what is used in glazing the shadows: if you should mix varnish, the inconvenience will be, that the colours will drie too fast, that you cannot sweeten the shadows with the flesh. Then give some touches on the strongest lights of the face, as the top of the nose, forehead, and by the eyes, inouth, and chin, with a colour made of white, pale Malticott, or yellow Oaker, and a little vermilion, mixed according to the complexion intended; then mix that colour a thought darker, and lay it on all the face, that was not painted before, very carefully; yet for the mouth, and cheeks, somewhat redder. Next, with a fine clean pencil, that has been used and worn a little, hatch and sweeten all your flesh-colours and shadows sweetly together, cleaning the pencil as often as tis requisite. Checks too pale, or any other part, may be regulated with suitable colours, whilst the piece is moist and wet. For swarth-complexions, mix the flesh-colour with white, yellow or brown Oaker, and light red, with shadows agreeable. I request you to observe the same method in painting breasts, hands, or naked bodies, as for the face: When any of these are drie, you may go over them again, by which second painting you may effectually mix your colours to your humor. Lastly, be ever careful, that your pencil be neddily guided, without the least flip or treps upon lines and features of a disagreeing colour.

To Paint Hair.

Tis not convenient in this Painting to use Varnish or Colours neer fo dark as the life, for the Print will darken it: as for example; Suppose I were to paint an head of hair that is black, I would mix white, black, red Oaker, with a touch of Lake or light red, all which may produce an ash-colour; and the hair or Peruke being coloured with it, will represent a natural black. Now to make the curles fliew stronger, touch the lightest parts with a lighter colour, and the darkest with the contrary; all which you may see through, if they are not laid too thick.

To paint Drapery or Garments.

To paint a piece of Drapery or Cloath, of a broken colour, you must take care of its mixture; yet you are to make three degrees of the said colour, that is one, the very colour, another more light, the third darker: this last is for the darkest folds, the lightest for the lightest pleats, and the colour between both for the other part of the garment; sweeten the colour with a worn pencil, that the folds may not lie hard. If you have a mind to embroider a garment, make fringe, or any other parts with shell or powdered Gold or Siver, mix then your metals with gum-water, and with a fine
fine pencil hatch or embroider your flowers, and touch the fringes, or what else best pleases you, before you either glaze or paint the garment you design to adorn, after this manner.

How to paint changeable Drapery.

Imagine that your garment to be painted had its ground purple, and the lights yellow; take then a fine pencil dipit in varnish, and with yellow Matterscott touch thinly all the lightest parts of your folds; if there be occasion repeat it, for your colour must be very thin with varnish: when drie, glaze it all over with Lake and Ultramarine, or Smalt with varnish once or twice, and let it drie; then mix three degrees of a purple colour, one of Lake, Smalt, and White, and lay them on, as the laft Paragraph directs you.

To paint several sorts of Red Drapery; and, first, of the Finest.

Take Carramine, and mix it thin with varnish alone; glaze over your garment once, if you'd have it very beautiful, two hours after do the fame again; and when that is drie, with vermilion and white, or vermilion only, you may paint all except the dark shades, which should have red. If you can see through the colour when drie, the lightest folds, touch them over with clear white, and they will appear more rich and ornamental.

Another Red near the fame:

Grind Lake very finely in oyl, temper it well with drying oyl and varnish; with this glaze over your Drapery two or three times, and when tis dry, paint the lightest with white, the darket with light or brown red, the remainder with vermilion.

Other Reds more ordinary, without Glazing.

Mix vermilion and white, and paint the strongest lights with it; the dark shades with a light or dark red, and the refit with vermilion. For the lightest folds, mix light red and white; for the dark pleats, brown red; for the refit, light red only.

To paint the best Blew, and glaze with Ultramarine.

Mix Ultramarine with thick Nut-oyl; but if you cannot wait and attend its drying two or three days, then instead of oyl use varnish, and glaze your garment three or four times over, letting it dry between every turn; when tis dried, make three degrees of Smalt and White very light, and with the clearest white do the lightest folds, and the refit as directed in the other colours. If you are unwilling to bestow Ultramarine upon it, you may after the fame method glaze with fine Smalt, and varnish it as often as with the former, and paint it with White and Smalt. An indifferent Blew is made with White and Smalt, mixt in several degrees without glazing.
Directions in Painting

To glaze and paint the best Purple-Drapery.

Glaze the garments thin, once over with Carramine, or Lake; when tis dry, paint it every where with Smalt and White, lighter or darker as you think best, but let the lightest folds have still a colour more light than the rest. Contrary to this you may produce a purple, by glazing your work over once or twice with Ultramarine, or Smalt, and paint it with Lake and White.

Purple without glazing.

Make a mixture of Lake, Smalt, and White, with which paint the Drapery, heightening and darkening the folds as in the other Receipts.

Yellow Drapery.

For your lightest folds, mingle yellow Oaker, and White; and brown Oaker for the shades: if that is not dark enough, Umber will make it so; but do over the other pleats with yellow Oaker. Such another colour may be made with White, yellow and brown Pink.

To paint the most beautiful Yellow.

Glaze your Drapery, or any thing you would have lovely, with brown Pink once or more, and the darkest parts oftner; after tis dried, touch the lightest folds with pale Mafficott, the next with yellow Mafficott: if some require a colour darker than that, mix yellow or brown Pink; but for the faddest of all, use yellow Pink and a little Umber. When tis dry, you may paint all with white, except the shades.

To finish, varnish, and polish Pictures, that are not laid upon Glass.

These are the same proceedings with those on Glass, unless you have a mind to adorn Embroidery, Fringe, or the like, with Gold or Silver. Touch then the forside of your picture with shell-gold in gum-water; or else, after you have varnished it two or three times with varnish made of Spirit, take Japan gold-size, with which hatch and lay it over with gold-dust; and if your judgment and experience will allow of it, you may touch and heighten all the strongest lights, and deepen your shades too on the forside, which gives so much life to it, that Limners themselves have been deceived, and mistook it for a piece of real painting. I desire young beginners to forbear, and not attempt this way of finishing till experience and practice shall give them encouragement. If you design to varnish and polish any of these Prints, lay on the colours without skins, and very even on the backside, and permit them to dry at least a week (for the longer the better) before you offer to varnish them after this following manner.

To
To varnish these Prints, or other Pictures, without polishing.

Take of the best white Japan-varnish, and an equal quantity of Varnish made of Maltick and oil of Turpentine; into these mingle together, dip a fine Camels-hair-brush; and with it varnish over your piece, four or five times carefully by the fire, as you are taught to do Japan; and you'll find that it gives a very rich gloss.

To varnish pictures, and polish them, like Japan.

With white-Japan-varnish only wash over your work five or six times, observing all the method for Japan directly. When it has rested three or four days, lay the Picture on the Cushion, whereon you cut the Leaf-gold: then with Tripole and water polish it; and lastly, clear it up as you do White-Japan.

These are the Rules in short, I thought fit to lay down in the treatise of this pretty Art; and I question not but they are full, most exact, and satisfactory, and will be found so, when the Ingenious Ladies shall put them into practice.

---

To Imitate and counterfeit

TORTOISE-SHELL and MARBLE.

CHAP. XXVI.

Before Japan was made in England, the imitation of Tortoise-shell was much in request, for Cabinets, Tables, and the like; but we being greedy of Novelty, made these give way to modern Inventions: not, but that it is full in vogue, and fancied by many, for Glass-frames, and small Boxes; nay, House-Painters have of late frequently endeavoured it, for Battens, and Mouldings of Rooms; but I must of necessity say, with such ill success, that I have not to the best of my remembrance met with any that have humour'd the Shell so far, as to make it look either natural, or delightful. But, to avoid all reflections, I must attribute this to that mistaken piece of frugality in them, who think, if they can agree with a Painter by the greatt, their busines is done; for by 

X 2
these means, they not allowing the Artift a Living price, he cannot spend both his oyl and labour, nor stretch his performances to the utmost extent of his skill. On the other hand, some there be who are indeed willing, but not being Masters of what they profess, sink and come short through their inabilities. I believe the complaint is universal; the ingenious and most excellent in each profession, being deftitute of a reward that is answerable and proportioned to the worthines of his undertaking.

But tis high time that we clofe with the busines in hand. And firft, the Tortoise-shell, I propofe for your imitation, is that which is laid upon Silver-Foil, and is always made ufe of for Cabinets and Boxes, for it gives life and beauty to the Shell, which else would appear dull and heavy. Now to counterfeit this very well; your wood ought to be clofe-grain'd, smooth, and cleanly wrought off, as Pear-tree; but if it be a coarfe-grained wood, as Deal, Oak, or the like, you must prime it with Whiting, as you have been taught in the chapter of black Japan for coarfe-grained woods. When either of these are rub'd smooth, as is required; take a fit varnifhing tool dip't into a gallipot of the thickeft of your Seed-lac-varnifh, and wet with this varnifh the breadth of a Silver-leaf, which you must take up with cotton, and clap on it whilf tis moist, dabbing it clofe to the work, as you have been taught in Guilding. This done, wash again, and lay on another leaf of Silver, ordering it as before, and fo continue, till the whole is fo overspread with Silver. When tis through dry, with a fine hair-brushe sweep off all the loofe Silver. Next, grind Collins-earth very finely on a grinding-stone, mixed either with common fize, or gum-water; this I efteem better than Lamblack, because Collins-earth comes much nearer to the colour of the Shell: Being finely ground, mix it with more common fize, or gum-water, as you have made ufe of either in the grinding. With this spot the darkest of your Shell, striving to the utmost to imitate it as nearly as is possible; and in order hereunto, I counsel you to procure a piece or more of the true, right Shell, that hath much variety in it; this lying by you, will quicken and affift your fancy, and enable you to perform it with much more cafe and cunning. You may observe, (when this is done, that several reds, lighter and darker, offer themselves to view on the edges of the black, and sometimes lie in ftrecks on the transparent part of the shell:) To imitate this, you must grind Sanguis Draconis very fine with gum-water; and with a fmall pencil draw those warm reds, fushing it in and about the dark places more thick, but fainter, thinner, and with less colour towards the lighter parts of the shells; sweetening it fo, that by degrees it may lofe its ftrength of red, being intermixt with, and quite loft in the silver, or more transparent part. Tis worthy your obervation, that thofe who are expert and ready at spotting or working this imitation, do uфually grind the forementioned colours dry and very
To counterfeit Tortoise-shell and Marble.

very finely upon a stone; and mix 'em with fine Lacc-varnish as they work them, which is most agreeable and proper, as I have noted before, being not so apt to polish off as Size or gum-water; notwithstanding, I advise young beginners to use size or gum-water, for I suppose they are not able to do it so well, that it should not require a review and correction; for then they may with ease and a little care rub out any faulty place, and go over it again, until it is done artificially, (but this convenience is not to be had, if you employ Lacc-varnish at the first.) When this is done, and dried, give it five washes of your Seed-lace-varnish; let it rest one day; after which time rub it gently, till it is smooth and fit for the second operation: in order to which, grind Dragons-blood and Gambogium, in an equal, but small quantity, very finely; put them into as much Seed-lace-varnish as will wash it five times more: permit it to stand twelve hours, and then allow it the third varnishing, and with the last mixture wash it five times, till your silver is changed into gold, or a colour like it. Note, that your first washings may be with the coarsest, the two last with the fine and clearest of your Seed-lace-varnish; avoid making your varnish too thick and high coloured with Gambogium, and Sanguis Dracoris, but heighten it by degrees, otherwise your silver will be too high-coloured, before you have given it a sufficient body of varnish. When it has stood two days, polish and clear it up, as you have been instructed in the treatise of black varnishing.

Another way to counterfeit Tortoise-shell.

First, prime, lacker, and size your work in oyl very thin, as you are taught before in the Art of Guilding, and when your silver is laid on and dried, let these colours be ground fine and thick in drying-oil, placing them on your Pallet; these are, burnt Umber, Collins-earth, brown Pink, and Lake. Do over your work with Turpentine-varnish, and whilst it is wet, mix brown Pink and Lake thin with varnish; and lay all your faintest clouds or spots, which you may often very sweetly, fixing your varnish so moist. After three hours standing, or longer, if the colours are dry, with a large, soft Tool, wash it lightly over; and again wetting it, lay in your clouds more warm and dark with Umber and Collins-earth, before it dries; always observing the life, and sweetening your work, which is blending and mixing two colours after they are laid, so that you cannot perceive where either of them begin or end, but insensibly join with each other. If the clouds are not dark enough, repeat the varnishing and clouding once more, where it is required. When it is well dried, glaze it two or three times with brown Pink, yet a little tincture of Verdegrees in it will not be amiss; if you had rather, you may varnish it with Lace-varnish, and finish it as you did the former.
To counterfeit Marble.

Whiten and prepare your wood in all respects as you do for white Japan; and after you have done it over with flake white, or white-lead, if you design a white with some veins, use some Vine-black, (which is made of the cuttings of Vines burnt and ground,) mix two or three degrees of it with white-lead and a very weak size being warmed, until you have produced the intended colour for the clouds and veins of the Marble. Being thus far advance't, call for a large, clean brush, wet your piece' over with water, and before it is dry, with a great Camels-hair-pencil, dip it in the palest thin mixture, fluff or lay the faintest large clouds and veins of your Marble, which being laid on whilst the work is wet, will lie so soft and sweet, that the original will not exceed it. Then if your work be not too dry, take a smaller pencil, and with a colour one degree darker than the first, touch all the lesser veins and variety of the Marble: If your work drie too fast, wet it again with the brush and water, and lay not on your colours when the water is running off, lest they bear it company. Lastly, take a small-pointed feather, and with the deepest colour touch and break all your fuddain or smaller veins, irregular, wild, and confused, as you have them in the natural Marble. After a days drying, cold-clear it, that is, do it over with Flaske, or Parchment-size; and then varnish, polish, and clear it up, exactly in all things according to the directions for white Japan, to which places, and others above mentioned, we refer you. By mixing other colours this way, any fort of Marble is subject to your imitation; and, if neatly done, well polished, and varnished, will not only exceed any Marbling in oyl, but will in beauty and glofs equal the real Stone.

CHAP. XXVII.

Of Dying or Staining Wood, Ivory, &c.

To Dye Wood a beautiful Red.

Woods, that are very white, take this dye the best of any: set a kettle of water boiling with a handful of Allom, cast your wood into it, permitting it to boil a little; that done, take your wood out, and put into the said water two handfuls of Brazil wood, then return your wood into the vessel again to boil for a quarter of an hour, and is concluded. When dry, you may rub and polish it, or varnish it with the tops of Seed-lac-varnish, and polish it; by which management, you will find the wood covered with a rich and beautiful colour.

To stain a fine yellow.

Take Burr or knotty Ash, or any other wood that is white, curled, and knotty; smooth and rush it very well, and having warmed
Of Dying or Staining Wood, &c.

it, with a brusht dip't in Aqua fortis wash over the wood, and hold it to the fire, as you do Japan-work, until it leaves smoking: when dry rush it again, for the Aqua fortis will make it very rough. If to these you add a polish, and varnish it with Sead-lace, and then again polish it, you'll find no outlandish wood fails it; for the curled and knotty parts admit of so much variety, being in some places hard, in others soft and open-grained, to which Aqua fortis gives a deeper colour, than to the harder and more resilling parts. In short, you'll perceive a pleasing variety interwoven, beyond what you could imagine or expect. If you put filings or bits of metals, as brats, copper, and iron, into the Aqua fortis, each metal will produce a different tincture: the best French Pillols are flockt generally with this sort of wood, and stained after this manner.

To Dye or Stain Woods of any colour, for Inlaid or Flannel'd work, done by the Cabinet-makers.

Use the moistest horse-dung you can get, that has been made the night before; through a sieve or cloth squeeze out what moisture you judge sufficient for the purpose; convey it into several small vessels fit for the design; in each of these dissolve of Roach-allom, and Gum Arabick, the bigness of a nutmeg, and with them mix reds, blows, greens, or what colours best please you, suffering them to stand two or three days, yet not without often stirring them. Then take your woods (of which I think Pear-tree is the best if't be white,) cut them as thick as an half-crown, which is in all reason thick enough for any Fine-cropped or Inlaid work, and of what breadth you please; making your liquors or colours boiling hot, put the wood into it, for as long time as will sufficiently colour them; yet some must be taken out sooner than the rest, by which means you'll have different shades of the same colour; for the longer they lie in, the higher and deeper will be the colours: and first variety you may well imagine contributes much to the beauty and neatness of the work, and agrees with the nature of your parti-coloured flowers.

To Dye or Stain Wood Black.

Take Log-wood, and boil it in water or vinegar, and whilst very hot brusht or stain over your wood with it twice or three times; then take the Galls, and Copperas, well beaten, and boil them well in water, with which wath or stain your work so often till it be a black to your mind; the oftner it is layed, the better will your black be: if your work be small enough, you may steep it in your liquors instead of washing it.

The best Black Dye for Ivory, Horn, Bone, &c.

Put pieces of Brats into Aqua fortis, letting it stand till tis turn'd green, with which wath your Ivory (being polished) once or twice. Next, boil Logwood in water, into which put your Ivory, whilst tis warm, and in a little time it gives a fine black, which you
you must now rub and polish again, and twill have as good a gloss and black as any Japan or Ebony.

If you desire any foldage, flowers, or the like fancies should remain white, and of the same colour with the Ivory; draw them neatly on the Ivory with Turpentine varnish, before you flain it; for those places which you touch with the varnish, are so secured by it, that the Dye cannot approach or discolour them. After this dyed, if you can hatch and shadow those fancies with a Graver, and fill the lines by rubbing and clearing up the whole with Lamblack and Oyl, it may add much to its ornament and perfection.

To Stain a Green colour on Wood, Ivory, Horn, or Bone.

First, prepare either of them in Allom-water, by boiling them well in it, as you were just now instructed. Afterwards grind of Spanish-green, or thick common Verdigras, a reasonable quantity, with half as much Sal-Armoniack; then put them into the strong-est wine-vinegar, together with the wood; keeping it hot over the fire till this green enough: if the wood is too large, then wash it over scalding hot, as in the other instances.

To Dye Ivory, &c., Red.

Put quick-lime into rain-water for a night; strain the clear through a cloth, and to every pint of water add half an ounce of the scrapings of Brasil-wood; having first boil'd it in Allom-water, then boil it in this, till this red enough to please you.

Thus, Courteous Reader, are we at length arriv'd at our desired Port: Our Performances have been no way inferior to our Promises. What we engaged for in the beginning, we have punctually accomplish'd; and nothing certainly remains, but that you convert our Precepts to Practice; for that will be the ready way to examin, and try, whether they are false or insufficient. We have all along been directed by an unerring Guide, Experience; and do therefore advise you, upon the least miscarriage, to make a diligent review, and doubt not the second thoughts will convince you of too slight an observance. We desire you'd be as exact and regular in your performances, as we have been in ours; for by these means, Satisfaction will attend both Parties, all our designs must succeed to our wish, and our Labours shall be crowned with success and reputation.

FINIS.
A Pinewing Trunke for Pendants, Necklace Rings & Jewels.
A Pagod Worship in the Indies

Another
For Drawers for Gallowts to be Places according to ye fancy.