THE
DOMESTIC DYER,
BEING
RECEIPTS
FOR DYING
Cotton and Linen,
HOT AND COLD.

NEW-ENGLAND:
PRINTED FOR DOMESTIC USES.
1811.
(PRICE SIX PENCE.)
THE following receipts are calculated on a larger scale than will always be necessary for domestic uses; but the articles must, in every case, be in the same proportion.

A copper, or brass kettle is necessary in all cases of dying.
TUBES.

1. BLUE—FOR COTTON, LINEN, YARN, &c.

To a tub that will hold thirty-six pails of water, take twelve pounds of lime, flack it, put it in, stir it ten or twelve minutes; then add six pounds of copperas, dissolved with hot water, stir it as before; then add six pounds of indigo, ground fine, stir it incessantly two hours; for three days, stir it three or four times in a day, then let it stand fifteen or twenty hours before the yarn is put in, lay sticks across the tub, to hang the yarn on, that it may not reach the bottom; move the yarn round every fifteen minutes. Six hours is sufficient for the first coloring of the dye; as the dye grows weaker, longer time is required: rinse and dry it in the shade.

When the dye is reduced, then recruit it in manner and form as in setting, only when there is a great quantity of sediment at the bottom, then the dye must be dipped off, leaving the sediment in the bottom; then throw away the sediment, shift the dye back, and if the tub is not full enough, then add more water (rain water is required in this dye in setting and recruiting). The dye must not be worked at too soon after recruiting, or setting, and it must not be crowded too full in coloring, but judgment must be used by the dyer, &c.
2. BLUE—FOR COTTON AND LINEN, COLD.

TO set a tub of twelve gallons, take ten gallons of good fig or urine, to which add three gills of spirits, one pound of good indigo, three ounces of pearlash or a quarter of a pound of good madder, and a pint of wheat bran; put the indigo in a bag, and rub it in the dye till the indigo is dissolved, and stir the dye well together with the ingredients; let it stand twelve hours covered close and kept warm. After the dye has come to work, wet the yarn in hot water, with a little pearlash in it; let it cool, then put it in the dye loose; let it lie in the dye twelve hours, then wring it out and let it air; and if it is not dark enough, then put it in again. There ought to be something at the bottom to keep the yarn off of the sediment.

There may be a saving in coloring cotton or linen, by first coloring brown or purple, as I shall hereafter mention. Silk may be dyed in this dye, but not in the blue vat.

3. BLUE—FOR COTTON AND LINEN, HOT.

HEAT water sufficient for your yarn, say for five pounds of cotton or linen yarn, take five ounces of blue vitriol, run your yarn or let it lie in the dye one hour, then add three pounds of good logwood chips, boil well and put in the yarn; let it lie one hour, then air and add two ounces of pearlash, let it lie thirty minutes; then, if it is not dark enough, add a little blue vitriol,* put it in again, and you

* RECEIPT.—This compound, or blueing is made thus: Take one pound of common good indigo, six pounds oil vitriol, half a pound of stone lime; put these together in a stone pot, or some earthen vessel, that will contain six times the quantity of this compound, or it will be liable to run over. First put in the vitriol, then the indigo, then the lime; stir this continually one hour, or till it gets pretty well settled and
will have a good looking blue, but it will not be so lasting a color as the two forms before mentioned.

4. To take the color out of Silk, Cotton or Linen, when spotted, or another color is wished.—Hot.

To one barrel of hot water, take half a gill of oil of vitriol, put it in the goods; run them fifteen minutes, air and rinse them in fair water immediately, lest it should endanger the goods.

I have reduced black without injuring it, and made a yellow of it in this form.

5. FOR GREEN—ON SILK. HOT.

Take two pounds of sulfic, boil well, till the strength is well out, then take out the chips, and add a quarter of a pound of alum, and six ounces of bluing, prepared as in receipt; stir it with the dye till it is well mixed, then handle your silk fifteen or twenty minutes; stir it lively, and keep it open and loose in the dye; (silk should never be wenched as woollen goods) air, and if not deep enough, add a little more bluing; and if not yellow enough, then a little alum, run again fifteen minutes; then air; and if the color suits, rinse immediately. The dye ought to be so fixed as to color quick, and there must not be a great quantity colored at once in a dye; for the dye will get too strong with the vitriol, which will endanger the silk; but with proper care, it may be colored without any danger.

cool—for it will boil and ferment in a terrible manner. This will be fit for use in forty-eight hours.

This compound is used for dying Prussian Blue, Green and many other colors.
6. GREEN—ON COTTON OR LINEN, COOL.

TO set a dye, take two pounds of logwood, and one pound of fustic chips, boil them well, then add a quarter of a pound of allum, and run your goods one hour; then add a quarter of a pound of blue vitriol, run your goods thirty minutes, then add two ounces of pearlash; run again, and handle till your color pleases.

7. YELLOW—ON COTTON OR LINEN, HOT.

TAKE two pounds of the leaves or peelings of onions that are clean and clear from dirt; put them in fair water, boil well, then add half a pound of allum, run your goods one hour, and you will have a good color.

8. ORANGE COLOR—ON COTTON AND LINEN.

TAKE two pounds of copperas, dissolve it in hot water, and have the liquor very strong; let it stand till nearly cold; run your goods one hour, then dip it in good lye, handle it till perfectly wet; then let it drain, and hang it in the sun fifteen minutes, and the sun will turn the color; continue to manage in this manner, dipping it in the dye and hanging it in the sun till dark enough.

FLESH COLOR—ON COTTON AND LINEN, HOT.

TAKE one and an half bushels of black-birch bark, and half a bushel of hemlock bark, boil well; then add a quarter of a pound of allum, and two ounces of pearlash; run your cloth or goods till your color pleases.
10. RED—ON COTTON OR LINEN.

TAKE six pounds of Nicaragua chips, boil them till the strength is well out; then add half a pound of alum, and let it stand till cold; run your cloth or yarn into hot water, with a little pealashes in it; then air, and put it in the dye, frequently handling over till the color suits.

11. COTTON AND LINEN—REDDISH BROWN, HOT.

TAKE butternut, cassafra, black alder, and hemlock bark, a bushel of each; boil well, run your goods one hour, then add two pailfuls of lye, or a quarter of a pound of pealashes; run your cloth or goods; and handle till your color pleases.

12. FOR PLUMB COLOR OR PURPLE—ON SILKS, HOT.

TAKE six pounds of logwood chips, and three pounds of redwood chips, boil well till the strength is well out of the chips; then add one pound of alum, and run your goods one hour; then add one ounce of verdigrase, made fine and dissolved in fig or urine, described before, and add one gallon of fig or urine; run your goods thirty or forty minutes, and if your color is not dark enough, then add a little blue vitriol, and handle till your color pleases.

13. PURPLE—ON COTTON OR LINEN, COLD.

TAKE three pounds of logwood chips, boil well, till the strength is well out and the dye very strong, (for all cotton dyes require to be strong;) then add
half a pound of allum, and one ounce of pearlashes; let it stand and get cold, dip your goods into hot water, air, and put them into the dye loose, handle over once in fifteen or twenty minutes; let them lie in the dye in this manner till the color suits. It must be observed in dyeing cottons and linens in cold dyes that that the air and sun are very necessary to brighten and strike the color in. Let the goods lie in the air and sun, three or four times in the course of your coloring, fifteen or twenty minutes at a time. This preparation is suitable for blue, as mentioned in receipt 2d.

14. BROWN—ON COTTON AND LINEN, COLD.

Take of maple or white oak bark, one bushel, boil well till the strength is well out, then take the bark out, and have dye sufficient to wet the goods; then add one pound of copperas, let it stand till nearly cold; run your goods in hot water with a little pearlashes first; then put it in the dye, and handle over once in ten or fifteen minutes, and air, as described before in receipt 13th; and handle in this manner till the color suits; then rinse clean. This is the brown mentioned in receipt 2d, for a saving in blue; but I prefer the purple; but when colored blue, after it is dry, it is necessary to scald it in salt and water, to bind the color.

15. DOVE OR LEAD COLOR—ON COTTON OR LINEN, COLD.

Take one pound of nutgalls pulverized, boil in water one hour, then add two pounds of copperas; let it stand till cold, and have liquor enough to wet the goods; (it requires to be very strong) put your goods in the liquor, and handle once in five or six
minutes, wring and air once in half an hour; dip in this manner three hours, then rinse. This liquor ought to be put in a tub, and another liquor prepared in another tub, in this manner, viz.—take six pounds of sumac of one year's growth, cut and well dried with the leaves all on, in the summer season, and three pounds of logwood chips, boil well till the strength is well out, then shift it in the tub, and let it stand till cold; then run your goods in the same manner as before described, handle in this two hours: if the colour is not then dark enough, run again in the copper- as and galls liquor, then rinse and run in the logwood again, and handle in this manner till your color suits.

N. B. Cotton and linen, when dyed in cold dyes, must always be wet and run in hot water half an hour, and then aired; and a little pearlalhes is good in the water, to cleanse the goods for coloring, &c.

Cold dyes will remain good always if properly re- cruited.

16. OLIVE—ON COTTON AND LINEN, COLD.

TAKE one pound of nutgalls pulverised, put them in water, boil one hour, then put it in a tub, then add two pounds of copperas, have the liquor strong, and enough of it to wet and cover the goods; then dip in the hot water; then stir the galls and copperas together, then put in your goods, and handle over once in five minutes, that no part shall be confined, wring and air every half hour; handle in this liquor two hours, then rinse, then add three pounds of sul- tine, and one pound of logwood chips, boil well till the strength is well out; then add five ounces of good madder, and two ounces of allum; let it simmer a few minutes, then shift the liquor into a tub, and let it stand till cold; then handle your goods in the first liquor two or three hours till the color is well raised; and if it is not dark enough, then take two pounds of sulphur, and one pound of logwood, boil
well; let it cool, and fadden with copperas as much as is necessary, and handle till your color please.

17. OLIVE—ON SILK, COTTON OR LINEN, HOT.

TAKE five pounds of fustic, and two pounds of logwood chips, boil well; then add a quarter of a pound of blue vitriol, and a quarter of a pound of alum, run your goods one hour; then add one pound of copperas, and handle till your color please. If the color is not dark enough, you may add more copperas, &c.

18. LIGHT OLIVE—ON COTTON AND LINEN, HOT.

TAKE four pounds of fustic chips, and half a pound of logwood chips, boil well, then add two ounces of alum, and one ounce of blue vitriol; then run your goods till the strength is well out of the dye; then fadden with copperas to your liking, and handle till your color please.

19. SLATE COLOR—ON COTTON AND LINEN, HOT.

TAKE hot water, and dissolve one pound of copperas; run your goods forty minutes, then air and rince and shift your liquor from your copper; fill with fair water; then add three pounds of logwood, boil well, run your goods one hour, then add a quarter of a pound of blue vitriol, and handle till your color please.
20. BLACK—ON COTTON AND LINEN, HOT.

TAKE four pounds of good logwood, and two pounds of suffic chips; boil well; then add a quarter of a pound of blue vitriol, run your cloth one hour, or till the strength is well out of the dye, then add with two pounds of copperas, and one gallon of good old fig; run your cloth, and if it is not black, you must air and rinse, and shift your liquor from your copper, and set another dye in manner and form as the first, and handle again, and depend on having an excellent black at last. But if it is attended with a rusty brownness, you may put in one quart of brown ashes, or two ounces of pearl-ash, and handle lively, which is necessary in all hot silk, cotton, and linen dyes.

21. BLACK—ON COTTON AND LINEN, COLD.

TAKE one pound of nutgalls pulverised, boil in one pailfull of water one hour, then add two pounds of copperas, shift it into a tub, and add water sufficient to cover, and handle your goods very strong; then take fair water and fill your copper. Add four pounds of logwood chips, two pounds of fumac well dried, of one season's growth, and one pound of dry alder bark, boil well till the strength is well out, then dip off the dye into a tub, the chips remaining in the kettle; let it stand till cold.

The dye must be managed in this manner;—first run your goods in hot water, with a little pearlashes in it; run in this half an hour, then air and lay your goods into the copperas and galls liquor; handle over every eight or ten minutes, and air every half hour; handle in this two hours, then rinse clean and lay it in the logwood liquor; handle as in the other three hours, then if it is not black, put water in the copper upon the chips; before running in the
copper, let it steep and cool again, and add one pound of copperas; run in this one hour; but if it has a rusty brown appearance, which is occasioned by the logwood, then add two ounces of pearlashes, or brown ashes will answer if you have no pearlashes; run in this half an hour, then air and rinse clean, and if it is not black then recruit the liquors and make them stronger, and manage as before in the first preparation, and never fear but you will have a fine black.