(1.) * BROCADE, n.f. [brocado, Span.]. A silken stuff, variegated with colours of gold or silver.—I have the conveniency of buying and importing rich brocades. Spectator.—

Or flain her honour, or her new brocade.

Forget her pray'rs, or miss a masquerade. Pope.

(2.) BROCADE, or BROCANO, a stuff of gold, silver, or silk, raised and enriched with the flowers, foliages, and other ornaments, according to the fancy of the merchants or manufacturers. Formerly the word signified only a stuff, wove all of gold, both in the warp and in the woof, or all
of silver, or of both mixed together; thence it
palled to those of fluffs in which there was silk
mixed, to raise and terminate the gold or silver
flowers; but at present all fluffs, even those of
fluff alone, whether they be programs of Tours or
of Naples, satins, and even taffeties or flours,
if they be but adorned and worked with some
flowers or other figures, are called brocades.

(3) Brocades. Methods of manufacturing.
In manufacturing brocades, the flattened
gilt wire is spun on threads of yellow fluff ap-
proaching as near as may be to the colour of gold
itself. The wire, winding off from a bobbin,
twists about the thread as it runs round; and, by
means of curious machinery, too complex to be
described, one continued covering. It is said,
that at Milan there is made a sort of flattened
gilt wire gilt only on one side, which is wound upon
the thread so that only the gilt side appears; and
that the preparation of this wire is kept a secret,
and has been attempted in other places with little
success. There is also a gilt copper wire, made
in the same manner as the gilt fluff. Savary ob-
states, that this kind of wire, called false gold, is
prepared chiefly at Nuremberg; and that the ci-
devant ordnances of France required it to be
spun for distinction from the gilt fluff, on flaxen
or hempen threads. One of our writers takes no-
tice, that the Chinoys, instead of flattened gilt wire,
use flaps of gilt paper, which they both interweave
in their fluffs and twist upon gilt threads; this prac-
tice he inconclusively propages as a hint to
the Britishe weaver. But, whatever be the beauty
of fluffs of this kind of manufacture, it is obvious
that they must want durability. The weavers
themselves, according to Du Halde's account,
felicitate of this imperfection, scarcely use them in
any otherwise than in tapestry, and such other or-
naments as are not intended to be much worn, or
expected to endure. The Venetians have carried
on a large trade to the Levant, in a kind of bro-
cade called damaskets, which, though it has only
about the half quantity of gold or silver as that
made among us, looks far more beautiful. The
flattened wire is interwoven round and round together
on the silk threads, nor the threads stuck close in
the weaving; yet by pulling the fluff between the
rolls, the dispositions and management of which is kept
a secret, the tissue or fluff or is made to appear
on the pure brilliant plate of gold or silver. The
French ministry, judging this manufacture worth-
y of public attention, engaged the ingenious
St. Vaucanson, to contrive the machinery; a
gentleman well known for his curious pieces of
mechanism. See § 4.

(4) Brocades. M. Vaucanson's inventions
for making. This gentleman, in the memoirs
of the academy for 1739, gives an account of his
success, and of the establishment of this manufac-
ture at Lyons. The lower roller is made of wood,
4½ inches in length and 1½ in diameter; the up-
per one of copper, 16½ inches long and 5½ in di-
crater; this last is hollow, and open at one end,
for introducing iron heaters. For making the roll,
cylindrical, he has a particular kind of levers
wherin the cutting tool, which the most dex-
terous hand could not guide in a straight line
through such a length as 16½ inches, is made to
slide, by means of a screw, on two large feel
rulers, perfectly straight, and capable of being
moved at pleasure, nearer, and always exactly
parallel, to the axis of the roll. He first disposed
the rolls nearly as in the common flattening-mill.
In this disposition, ten men were scarcely suffi-
cient for turning them with force enough to ex-
tend the gilding duly; and the collars, in which
the axis of the rolls turned at each end, were or
guarded so fat, that the pressure continually dimin-
ished, insomuch that a piece of ten eis
hail the gilding faintly laid on the lid
part than on the flint. He endeavoured to obviate
this inconvenience by screwing the rolls closer and
closer in proportion as the fluff passed through, or
as the working of the collar occasioned more play
between them; but this method produced an im-
perfection in the fluff, every turn of the screw
making a faintible bar across it. To lessen the
friction, each end of the axis, instead of a collar,
was made to turn between two circumferential
rings called tition wheels; but even this did not an-
swer fully, for now another source of unequal
preasure was discovered. The wooden roll, be-
ing incomparable, had its diameter faintly diminished;
it likewise felt much rounder, & so that the pre-
asure varied in different points of its revolution.
On trying different kinds both of European and
Indian woods, all the hard ones split, the soft ones
warped without splitting, and of more than 10
rolls, there was not one which continued round
24 hours, even without being worked in the
machine. These failures put him upon contriving
another method of pressing the rolls together, so
that the force should always accommodate itself
to whatever inequalities might happen. The axis
of the copper roller being made to turn between the
friction-wheels as before, that the wooden end
is pressed upwards by a lever at each end, furnished
with a half-collet for receiving the end of the
axis. Each lever has the end of its short arm sup-
ported on the frame of the machine, and the long
arm is drawn upwards by a rod communicating
with the end of the short arm of another
lever placed horizontally; to the long arm of the
lever is hung a weight, and the levers are so propor-
tioned, that a weight of 30 lbs. presses the
rolls together with a force equivalent to 17½ lbs.
which was found to be the proper force for the
sufficient extension of the fluff. By this
contrivance 4 men can turn several rolls with
more ease than ten can turn those which are kept to-
tgether by screws; and the same weight acting un-
formly in every part, the pressure continues al-
ways equal, though the wooden roll should ever
become oval, and though the fluff be of unequal
thickness. A piece of cloth, of about two eis, is
fewed to the beginning and end of the fluff to
keep it out to its width when it enters and quits
from the rolls, which could not be done by the
hands for fear of burning or bruising them; as it
would take too much time to few these cloths in
every small piece of an eil or two, a number of

these are forced together. The stuff is rolled upon a cylinder, which is placed behind the machine, and its axis pressed down by springs to keep the stuff tight as it comes off. Four iron bars, made red hot, are introduced into the copper roll, which in half an hour acquires the proper degree of heat, or nearly such as is used for the ironing of linen; the wooden roll is then laid in its place, and the machine let to work. If more than one be to be prised at once, the wooden roll must be changed for another, for it will not bear a long continuance of the heat without danger of splitting; and therefore the manufacturer should be provided with several of these rolls, that when one is removed, another may be ready to supply its room as soon as taken off from the machine. It should be wrapped in a cloth and laid in a moist place. The principal inconvenience attending the use of this machine, is, that the heat necessary for extending the pencil, though it improves the brightness of white and yellow silk, is injurious to some colours, as crimson and green. A double projector will not supply the place of heat; and the only method of preventing this injury, of rendering it as light as possible, appeared to be to pass the stuff through with great celerity.

Brocade, Sullied, Method of Cleaning. Although broacades, by the caprice of fashion, are at present not worn, yet as they may soon become fashionable again, it is proper to shew how to clean them. For this purpose neither alkalis nor soap must be used; because, while they clean the gold, corrode the silk, and change or discharge its colour; and the latter also alters the shades, and even the species, of certain colours. But spirit of wine may be useful without any danger of its injuring either the colour or quality of the stuff; and in many cases proves as effectual for restoring the lustre of the gold as the most corrosive detergents. A rich brocade flowered with a variety of colours, after being disgracefully tarnished, had the lustre of the gold perfectly restored by washing it with a soft brush dipped in warm spirit of wine, and some of the colours of the silk which were likewise foiled became at the same time remarkably bright and lively. Spirit of wine seems to be the only material adapted to this intention, and probably the hoisted secret of certain artists is no other than this spirit disguised. Dr Lewis says he does not know of any other that is of sufficient activity to discharge the foul matter, without being hurtful to the silk. As to powders, however fine, and however cautiously used, they scratch and wear the gold, which here is only superficial, and of extreme tenuity.