The Art of Dyeing.—No. 19.

GREEN ON WOOL—In a number of works on dyeing, different receipts are given for producing the same color on different kinds of goods made of the same material, such as woolen yarn, merino, camlet, &c. This is wrong, for the same drugs will dye the very same colors and shades of all fabrics made of the same material. The stuffs that will dye green on wool, will also produce the very same color on the finest broadcloth or bombazine.

OLIVE GREEN—A very beautiful olive green may be dyed at one dip with logwood, fustic, and blue vitriol (sulphate of copper). For ten pounds of goods, take three pounds of logwood, seven of fustic, and half a pound of blue vitriol. These are all brought to the boil together in the dye kettle, and the goods entered, handled well, and boiled for an hour, when they may be taken out, washed, and dried. Chips of logwood and fustic may be used in the dyeing of pieces, but not for yarn or wool. The quantity of stuffs given will make a medium green. More of these will make a dark green, and less a fine apple green. This color does not stand exposure to the sun.

By boiling the goods in the above-named dye stuffs, only adding one pound of camwood, a dark and invisible olive green is the result. Indeed, a true olive green cannot be colored without using a little camwood. By using these very same stuffs in very minute quantities, drabs of various shades can be dyed. Any person may color this kind of olive green in a cast iron kettle. We therefore recommend it to the attention of our farmers for domestic wearing cloth, by substituting half copperas and half alum for the blue vitriol, and always adding some camwood. This makes a very permanent olive green.

SULPHATE OF INDIGO GREEN—Sulphate of indigo and fustic make the clearest greens on wool. All fancy green colors for carpets, and such like work, are dyed with these stuffs. Fustic liquor is put into a copper kettle, and one ounce of alum to the ten pounds of goods added. Sulphate of indigo is then added, in such a quantity that when stirred the color of the liquor will be of the shade you want on the goods. When the liquor is brought to boil, the goods are entered and boiled for half an hour, when they are taken out, washed, and dried. If it is desired to make the goods darker in the shade, more stuffs are added. As these colors are somewhat expensive, some camwood is added to the liquor for dark shades; indeed, very good invisible greens can be dyed in this manner by the addition of camwood. The goods must be carefully handled in dyeing these colors. From the very lightest pea green up to the darkest grass green, in fancy dyeing, all the shades are dyed with the same stuffs, but in varying quantities. The sulphate of indigo should be at least nine days old before it is used for woolen dyeing. It should also be made of the best Bengal indigo. As good indigo as that made in the East Indies has been, and can be made again, in South Carolina, but the manufacture of it is very unhealthy.

FAST GREEN—This color is now only dyed on broadcloth. It is produced by dyeing the goods a blue in an ash or woad vat for a base, then washing them well, and dyeing yellow on the top with a very strong decoction of fustic, and a little alum. It will take about a pound of fustic and an ounce of alum to the pound of goods; they should be boiled about three-fourths of an hour.

CHROME GREEN—Within a very few years the bichromate of potash (chrome of the dyer) has come into extensive use in woolen dyeing. It has been long used in cotton dyeing for a few colors, but it is now a very general mordant for colors on woolen goods.

Boil the goods for one hour in two ounces of chrome and one of crude tartar, to every pound of goods. Then lift them, allow them to drip for ten minutes, and enter in a clean kettle of logwood and fustic—4 pounds of logwood and ten of fustic to every ten pounds of goods. In this bath they are boiled for one hour, when they are taken out, washed, and dried. This color is more permanent than the olive green dyed with the sulphate of copper, but it is also more troublesome to dye.

Flannels should never be dyed green with the sulphate of indigo, for however beautiful the blue produced by it, warm water and sweat will discharge it. Green cloth, unless very dark, does not look well formen's wear. Soldiers in light green uniform do not look well; but dark green with red facings makes a very showy uniform. For female dress no color is more appropriate than green; light green for young females, the depths of shade corresponding with the age. Red is the complementary color of green, and some purple trimming on some part of a person's dress is necessary to relieve the green in a frock; green trimmed with purple looks well in the dresses of children.

Florida Indigo.

Indigo was formerly cultivated in Florida, for which the climate and soil is well adapted. It grows wild upon the barrens in almost every portion of the Peninsula. When cultivated by the English in this country, the indigo of Florida was considered in the London market superior to all others, except that of Caraccas. The manner of cultivating and manufacturing advantageously is as follows:

The seed, which is very small, is soaked for some twelve hours, then mixed with ashes or sand, and sown in drill rows, about eighteen inches apart. The time for sowing in Florida is from the middle of March to the first of April. When the young plant makes it appearance, it resembles white clover, and must be carefully weeded, and the earth kept loosed about its roots. Three weedings are sufficient to carry it up to the first cutting, which commences when the plant begins to bloom, say about the first of July. The plant is so easily injured by the sun after it is plucked, that the cuttings should be in the afternoon. As fast as it is cut, which is done by a sickle, it is carried to a vat called the steeper. This vat is made of plank, is water-tight, and varies in size according to the extent of the operations of the planter. The steeper is filled with cuttings immersed in water. Planks, with weights upon them, are then placed on top to keep the cuttings beneath the water. In this state the steeping is continued for about ten hours, or less, according to the temperature of the water. When the water assumes an olive color, it is drawn into the "beater," another vat, placed alongside and beneath the steeper, and connected by a tube, and fastened with a valve or spigot. The liquid is now churned by hand or with machinery, until it becomes lighter in color, and a blue pecula begins to make its appearance. From time to time lime water is thrown into the beater during the "churning." After the pecula spoken of distinctly appears, the water is suffered to remain about four hours for the indigo to settle. It is then drawn off, the sediment placed in bags, and hung up to drain. When drained sufficiently, it is placed in boxes to dry, under gentle pressure; and when dried firm, it is cut up into square cakes and placed in the shade, to become completely dried by evaporation. The shorter the steeping and the less the beating, the lighter will be the color of the indigo. The indigo plant will yield two or three cuttings a season, and one hand will cultivate about three acres, the result being from 175 to 200 lbs. of the article. Unlike sugar cane or corn, the indigo requires no expensive machinery. Where it is made only for domestic use, barrels are used for steeping and beating.—[Florida News.

Curious Occurrence.

We see it stated in a number of our cotemporaries, that on the 14th ult. the artesian well in Selma, Ala., which had reached a depth of 440 feet, and was delivering near 500 gallons per minute, suddenly sank some 15 or 20 feet below the surface. The most extraordianry consequence of this phenomenon is, that all the wells in the vicinity have become dry.

An American New Manufacture in England.

We learn by the London *Mining Journal* that Dr. William H. Smith, of Philadelphia, recently read a paper before the Royal Society of Arts on the utilization of the slags of smelting furnaces, by manufacturing it in England, as has been done for a number of years in this country, into articles of merchandise, such as the beautiful ferruginous stone ware so common among us. The iron manufacturers of England seem to be delighted with the prospect of converting the slag of their furnaces into something useful, and they speak in terms of the highest praise respecting the invention. The London *Mining Journal* says, "if our transatlantic brethren owe to the parent country many arts and inventions which they have adopted, and in some instances improved, we must at least in this achievement of art acknowledge them to be our predecessors; for this branch of manufacture now for the first time introduced in detail to the commercial community in the British Isles, has been some years succesfully employed in the United States of America."

The introduction of this American manufacture into England will be the means of adding greatly to the wealth of that country, for it is simply converting materials which have heretofore been considered a waste and an encumbrance, into articles of use and ornament. In the manufacture of one tun of iron, there is produced about two tuns of slag, which heretofore has been cast upon the highways, and in general considered a nuisance around furnaces. When we take into consideration that three millions of tuns of iron are manufactured annually in Britain, producing six million tuns of slag, we can at once see what advantages must accrue to the British iron makers from the introduction of this new manufacture, which has already been commenced at the Dowlais Iron Works. No wonder they are somewhat excited by its introduction. At the meeting of the Society of Arts referred to, Dr. Smith exhibited a number of beautiful specimens made from the slag of American, French, and English furnaces, which were examined by the auditory, and excited general admiration. We feel somewhat proud of our American inventors, who, within the past few years, have introduced so many new and useful inventions, from Colt's pistols to unpickable locks; reaping and sewing machines; and even this new stone ware. If we have not already, we intend to pay back with compound interest in useful American inventions, Mother England, for all we have received from her in mechanism and the useful arts.

The Palace of Industry in Paris.

The immense scaffolding raised for the ornamentation of the principal facade of the Palace of Industry is about to be taken down. That facade is composed of three foreparts, viz: two at the extremities in the form of pavilions, and one in the center forming the chief entrance. Although this entrance is scarcely unmasked, a pretty good judgment may be formed of the fine ordonance of this truly monumental entrance. On a high sub-basement adorned with green marble slabs from the Pyrenees, rest four columns of the pure Corinthian Order, and whose profiles are of great regularity.—Above there is an attic decorated with pilasters of a Composite Order, which are surmounted by the wreathed letter N. E. On a perpendicular line with that attic, two Geniuses are seen leaning on the Imperial arms.

In the semi-centers of the entrance door two Fames in high-relief are seen sounding trumpets. A piedouche with the arms of the City of Paris supports a black marble slab bearing the inscription of the destination of the monument. On a level with the attic, on the frieze, is a great basso relievo representing Agriculture, the Arts, and Industry. In the center of that basso-relievo, there is a bust placed on a pedestal with the words in golden letters—Napoleon III., Empereur. Finally a colossal statue representing France crowned with a glory and distributing crowns to the laureates, commands the whole.

As for the lateral facades they are only divided by the four corner pavillion, but the same frieze passes on the circumference of the monument separating the ground floor from the first story. On that frieze are to be read the names of the most illustrious men of all time and of all nations belonging to the Arts, Sciences, to Industry, Commerce, and Agriculture. The decoration of the upper story is composed of the inscription of the principal towns of France inserted in the intercolumnation of the windows.—[English and American Intelligencer, Paris.

Sheep Shearing.

By a reference to the patent claim page, in this number of the paper, it will be seen that a patent has been granted to Palmer Lancaster, of Burr Oak, Mich., for nothing less than the shearing of sheep by machinery, instead of a pair of sheep-shears—the common way. The machine, which is small and neat, is hung by a strap to the arm of the operator, and placed on the body of the sheep to be shorn. By simply turning a handle back and forth, and moving the machine over the body of the sheep, the wool is made to fly in double-quick time. It is well known that the most skillful hands at sheep-shearing do not cut the fleece even; and besides, the skin of the animal is invariably clipped out by the shears in many spots. This instrument cuts the fleece rapidly and evenly, never cutting any part of the wool twice; and it avoids cutting the skin of the animal; it is therefore a humane as well as a new contrivance.

New Fountain Pen.

Last week a patent was granted H. K. McClelland, of Eldersville, Pa., for an improvement in fountain pens, the nature of which consists in providing the tube handle with a small india rubber bag for containing the ink. In the tubes there is a valve, which is operated by a spring key like that of a musical instrument, and there is a small piece of sponge at the neck of the tube, which gives out the ink to the pen. When writing, by pressing with the finger upon the key, the ink flows out to the sponge when wanted, and keeps up a supply to the pen, thus obviating the trouble of dip, dip, dipping into an ink bottle.

Van Horn's Slide Rest.

The improvement in slide rests for which a patent was granted to Chester Van Horn, of Springfield, Mass., last week, is of an entirely different character from that of Mr. Noyes'.

It consists in forming the tool block of two parts, and connecting them together by a dovetail, so that the upper part may slide upon the lower, the faces of the two parts that are in contact and connected, being in an oblique position, which, as it (the upper part) is moved backward and forward, causes the tool to be elevated or depressed.

The Springfield Tool Co., Springfield, Mass., have now ready for sale a few ten feet engine lathes, with cross feed, and this beautiful improvement attached. All the mechanics who have witnessed its operations consider it to be a most valuable invention, and that it will win its way into general favor.

Great Mowing Machine Case.

In the U. S. Circuit Court, held at Buffalo, N. Y., on the 30th March, in suit, for an infringement of Ketchum's patent on Mowing Machines, instituted by Howard against Forbush; an injunction was granted against the latter, establishing the validity of Ketchum's re-issued patent of 1853.

India Rubber Again.

At New Haven, Conn., on the 26th ult., before Judge Ingersol, U. S. District Court, a non-suit was entered for the Hayward India Rubber Co., defendants, in the case of Horace H. Day, who sued them for infringement of the Chaffee patent. The suit was withdrawn by plaintiff's counsel, and costs given for defendants. This material can stand a few more pulls yet,

We understand that the U. S. Court in Rhode Island has not finished the subject yet, although H. M. Day has gained one suit.