THE ADVOCATE OF INDUSTRY, AND JOURNAL OF SCIENTIFIC, MECHANICAL AND OTHER IMPROVEMENTS.

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advance, and the remainder in six months. Agents employed.

How to Cultivate a Talent for Drawing. The ability to delineate objects of nature and art is not only one of the most graceful, but most useful accomplishments, and should be cultivated by every person who has a taste for it, and especially should it be fostered in childhood. On this subject, Ruskin, the eloquent writer on architecture, painting and the ornamental arts, says :-
"If a child has talent for drawing, it will be continually scrawling on what paper it can get; and should be allowed to scrawl at its own free will, due praise being given for every appearance of care or truth in its efforts. It should be allowed to amuse itself with cheap colors almost as soon as it has sense enough to wish for them. If it merely daubs the paper with shapeless stains, the color box may be taken away till it knows better; but, as soon as it begins paiating red coats on soldiers, striped flags to ships, \&c., it should have colors at command ; and, without restraining its choice of subject in that imaginative and historical art, of a military tendency, which children delight in (generally quite as valuable, by the way, as any historical art delighted in by their elders), it should be gently led by its parents to try to draw, in such childish fashion as may be, the things it oan see and likes-birds, or butterflies, or flowers, or fruit. In later years the indulgence of using the color should only be granted as a reward, after it has shown care and progress in its drawings with pencil."

## Improvement in Tenon Saws.

This improvement consists in the use of two saws, obliquely set on the axle at any angle that may be required. The saws cut the tenon of any thickness, and in any position that is wanted. Fig. 1 is an elevation of the saws, washers and axle set for cutting a tongue in the center of the stuff. Fig. 2 is a view showing the section of the beveled and concave washers, and the saws set for cutting a tongue more at the side of the stuff. A is the spindle, B the pulley which receives the driving power, and $b b$ are the journals. Beyond the collar, $c$, which is forged and turned on the spindle, extends the plain part, $d$, Fig. 2, on the outer end of which a screw is cut for receiving the tightening nut, e. $f f$ are the saws, and $g g$ the beveled washers between them. Outside of the saws are the washers, $h h$, which bear flat against the saws, and have concave recesses turned in them for receiving the convex rings, $i \quad i . \quad \mathrm{J}$ is the piece of stuff which is being cut.
As the bevel washers, $g g$, are greater or less in thickness, the width of the tongue will be greater or less, the narrowest space between the saws being the thickness of the tenon.

## HARRISON'S IMPROVEMENT IN TENON SAWS.



This space can be varied by changing tne than the other, and so changing the position position of the two interior washers, and will be least when the thinnest parts of the washer 3 are brought into coincidence. In addition to the thickness of the tongue, the relative obliquity of the saws to the axis of the spindle can, by means of the washers, $k h$, and rings, $i i$, be made such that one saw will stand more oblique than the other, thus admitting of the cutting away of more wood on one side of the tongue as regards the end of the stuff, as seen in Fig. 2. This is a very useful invention, and wood-workers will appreciste its merits at a glance. It can be seen at the Crystal Palace, where there is one on exhibition.
For further information address the inventor, W. H. Harrisoa, No. 705 Lodge alley, Philadelphia, Pa. Patented July 14, 1857.

## SCHROEDER'S IMPROVED CARPET FASTENER.



The usual method of securing carpets, druggets and cover6 in general to a floor is, (as all our lady readers know) after having made it a trifle smaller than the space it has to cover, by stretching it with a stick and then nailing it down; and every time that the carpet is taken up, this process has to be gone through, much to the damage of both the floor and fabric, and often do the oarpets tear from the tacks by the contraction which they experience in certainstages of the atmosphere, and as the help says "They come undone of them-
selves." This is all prevented by the invention of R. E. Schroeder, patented April 21, 1857, and here illustrated.
Fig. 1 shows the fastener standing up, and the carpet loosely fastened to it, and Fig. 2 the same, showing the manner it holds the carpet down.
$A$ is a metal frame fastened to the floor. B is a spring, which, when the fastener, $c$, gets downward in the direction of the floor, at an angle of $45^{\circ}$, it forces it to rest on floor, at an angle of $45^{\circ}$, it forces it to rest on
the floor, and holds it there until pulled verti-
cally up again by hand or other means. C is the fastener, revolving through half a circle on a hinge, E , under which is the spring. The fastener has also on the end two prongs, D , which are inserted in the carpet.
This invention is likely to answer well, as it does not tear the carpet or injure the floor. When once they are put down, they may be regarded as fixtures, there being no occasion to take them up until worn out; and instead of it taking two men to lay or remove a carpet, one female may do it with ease in a very brief space of time.
Those of our readers who wish for further information may obtain it of the agent, Augustus Fuller, 83 State street, Rochester, N. Y.

## Niello.

Niello is a peculiar style of enameling, which consists in engraving or stamping figures on a plate of silver or gold, and then filling the incised lines, or impressed pattern, with a sort of enamel, differing, however, from true enamel, which is a kind of glass, by being formed of a mixture of the sulphates of lead, silver and copper. This mixture is a black color-hence the name niello, from nigellum, derived from niger, black-and when melted into the intaglio parts of a plate gives it somewhat the appearance of an inked engraved copper plate. A new kind of niello work was some time since introduced in Europe, in which, however, the figures are not produced by an enamel of sulphurct of silver, as in the true niello, but by a different colored metal ; thus on a plate of gold may be produced fine engravings, the lines of which are in silver.
And thiss kind of work is at the present time very much in vogue among the great and rich who can afford the uncomfortableness (for lusury it is not) of eating off silver and drinking out of gold.

Myrrh.
This substance is an agreeable perfume and is much valued by eastern nations for its antiseptic qualities as well as for its delightful odor. It was and is largely used as a component part of incense, and also in the embalming of the dead. In the tombs of Egypt, where the mummies of the great have lain in preservation for ages past, the odor of myrrh is very strong, and we have every reason to believe that it was one of the chief ingredients in the preparation of mummies. It is a gum resin, and occurs in tears of various sizes. They are reddish-brown, semi-transparent, brittle, of a shining fracture, appear as if greasy under the pestle, have a very acrid and bitter taste, and a strong smell. Myrrh flows from the incisions of a tree not well known, which grows in Arabia and Abyssinia, supposed to be a kind of amyris or mimosa. It consists of resin and gum in the proportions of 36 of the former to 66 of the latter. We use it only as a medicine.

## Labor.

The value of an industrial population cannot be too highly estimated, as however much capital may be at command, it is of no use until the true material, the hard working laborer or skillful mechanic are at hand to expend it and produce in its stead a road, a canal, a steam engine or a ship. Money is really worthless except in the relation it bears to the laborer; and the two are each dependent on the other, so the capitalist is entitled to the respect of the laborer, who in his turn has a right to the same from the moneyed man.

