## Scientific American.

# Hew Inventions.

#### Wax Poisons.

Few persons, says an exchange, especially, perhaps, of the very many young ladies who practice the very pleasant art of modeling fruits, flowers, &c., in wax, at all suspect the danger to which they are placed from the poisonous nature of the coloring matter of the wax which they handle so unsuspectingly. The white wax, for instance, contains white lead; the green, copper; the yellow, chrome yellow; the orange, chrome yellow and vermillion-all strong poisons-with many other kinds of wax equally poisonous, and therefore dangerous. Several cases are known in which young ladies have been attacked with partial paralysis of the hands and arms after having devoted some time to the practice of model-

#### Hawkins' Improved Halter.

The straps of halters as now constructed, are very liable to slip around the ring, and so quickly chafe and wear away, thus rendering them quite an item of expense to those who keep horses. The subject of our illustration is designed to remedy this evil, and render the halter more durable, by casting a flanch a little more than a quarter round the ring to which the straps are riveted. The common method of staying the straps from slipping is very imperfect, being an additional or supplementary strap connecting the other two, but as the stitches not only weaken the strap but very often become loose, its effect is very slight.

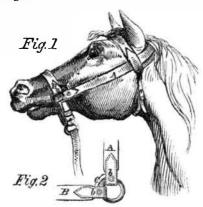


Fig. 1 shows the improved halter on a horse's head, while Fig. 2 fully explains the invention. A B are the two straps, secured by the rivets, b, to the flanch, C, of the ring, so that they cannot slip, and irritate the horse or wear themselves out. The ring may, of course, be made of any metal.

This simple, but really valuable improvement, is the invention of Samuel C. Hawkins, of Patchogue, L. I., who will be happy to give any additional particulars. It was patented October 5th, 1858.

### New Seeding Machine.

This machine is designed to plant either corn or cotton seed either in hills or drills. and requires only a person to guide it, being automatic in its operation.

Fig. 1 is a perspective view of the machine, A being the seed box, placed on a frame, B, which is supported at its back end by the roller, D. Two handles, E. E. are attached to the frame, for the operator to guide the machine with. F is an endless perforated band, which may be constructed of leather, or other suitable material, and which works over two rollers, G G (seen in the section, Fig. 3), placed just below the seed box, and so arranged that as it is moved by a belt from a pulley on the axle of D; each of these perforations carry off enough seed for one deposit, which drops down the conveying spout, H, into the ground. I I are the coverers. d is the cut-off, formed of two brushes, that

provided with radial arms, b, and as the machine moves along, this is oscillated by the crank, c, on which it is placed, which receives its motion from a connecting rod, K, and crank, a, on the axis of D. This continually oscillating in among the seed, acts as a stirrer, and prevents the seed from elogging, or be- the endless band.

coming matted together. Inside the seed box is a plate, L, which, as the seed gets lower, can be placed in the position shown by the dotted lines, so that it reduces the size of the box, and so keeps the seed always spread upon the bettom, and fills the perforations in

## KEIPER & FOX'S SEEDING MACHINE.

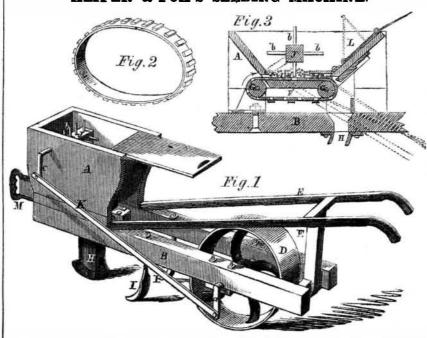
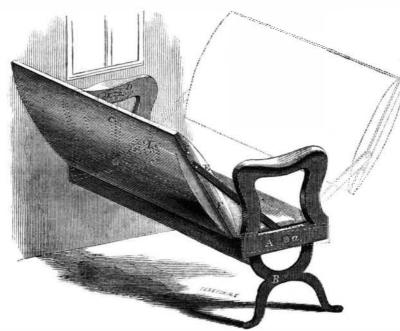


Fig. 2 represents the band which is used | for cotton seed instead of F. the transfer of the one for the other upon the rollers, G, can be made very quickly and by any one. These endless bands are not affected by moisture, like wood, and will plant damp seed equally as well as dry, which is a very important fea- ented August 24th, 1858.

ture for cotten seed. The animal which is to draw it is attached to the liuk, M.

It is the invention of A. C. Fox, of Texana, Jackson county, Texas, and D. B. Kelper, of Easton, Pa., either of whom may be addressed for further particulars. It was pat-

### PAINTER'S CAR SEAT.



The railroad companies are, we are happy to say, learning common sense gradually, although slowly, and, one by one, directors are beginning to see that attention to the comfort of passengers is an essential element in the increase of dividends. The improved car seats capable of being transformed into a couch or berth for night traveling, and to which subject we first directed the attention of inventors generally as a field for the exercise of their their genius, is becoming extensively adopted, and we are about to describe one of them. which is possessed of many distinctive features and peculiar merits. Any ordinary car seat can be altered to this plan very easily and they are no more complicated than the reversible seats now in use.

The seat may be suspended by a link, C, that by a pin, D', hooks into a slotted piece, D, in the side of the car, and by a center, a, in the side rail, A, or may be supported upon scrapes off any excess of seed that may be on | a center on the legs, B, and side of the car, so the band, F. In the box, A, is a shaft, J, as to form such an angle whichever side the

back be placed, as to give the most comfortable seat. When used as a seat, the back, F, with its cushions, I, is held in its position by the bar, E, and when used as a couch the back is turned over until the pivot or stop, G, comes in contact with E, and F rests against a small stop on the inside of the rail, and it assumes the position shown by the dotted

It is evident that this arrangement will form a seat or couch, so that the occupant can face either direction, and any person can perform the alteration from one to the other with as much ease as they would reverse an ordinary seat. This simple and ingenious contrivance is the invention of Wm. Painter, Wilmington, Del., who will furnish any more desired particulars. It was patented August 31st, 1858.

"It should ever be the aim of man," says an ancient sage, "to understand all old truths, and endeavor to develop new."

Measuring Rules made by Machinery.

A novel machine has just been patented by Dr. Church, of Birmingham, England, for making measuring rules. The description of it, as given in an English journal, reminds us of the famous mutton mills for making sausages. A sheep is thrown into a hopper, a momentary pause, and out comes the delicious morsel. This new machine requires only to be fed with the raw material (boxwood), and in the end delivers perfect rules. The wood to be operated upon is inserted in a clamp, and the machine connected with the driving power; then comes a whirring sound, a shower of boxwood dust, a momentary silence, and out comes a rule, so beautifully made that one is almost bewildered. But we examine the machine, says the editor with due gravity, and after a little exertion, succeed in following its motions. As we watch it we observe cutters one and two march forward, and in a desperate hurry cut off the ends; they return, and cutters three and four rise up like the ghosts from a stage trap-door. They have scarcely come up when they go down again, as though they only came just to show themselves. But they gave a slight hiss before disappearing, and we see they have left their impress on the edge of the rule side. They have cut away the recesses for the steady pin plates. The clamp holding the rule side now begins to move. It turns upon one end as a center, and makes a quarter of a revolution in a horizontal plane. The moment it begins to move, a fussy little cutter begins a series of jerking motions, as though it were snapping angrily at the end of the clamp for moving. But clamp stops in its stately motion, and cutter stops in its fussy motion, and we find that their joint motions were a conspiracy to form the different shapes at the end of the rule side, necessary for the insertion of the metal joint. In short, almost before one is aware that the strip of wood is securely fixed in the machine, the work is done.

It would weary our readers if we described the many machines which Dr. Church's patent embraces. We must content ourselves with stating that there is a machine for making the joint plates; a machine for drilling the holes in the joint plates, in the steady-pin plates, and in the tips; a machine for riveting the several pins by which joint steady-pin plates and tips are fixed on the rule; a machine for dividing or graduating the rule, and several others. Indeed, there appear to be machines for doing everything in the manufacture of measuring rules except growing the wood or ivory, and smelting the brass; and after what we witnessed, our astonishment could scarcely have been increased had the doctor introduced us to machines which, at the word of command, poured forth these "raw materials."

### Paddle Wheel and Screw.

A steamer called the Malta belonging to the Peninsular and Oriental Company has recently been transformed from a paddle-wheel into a screw propeller by Mr. Laird of Birkenhead, England, and with a decided improvement in speed. The engines of 500 horse power built by R. Napier were retained, but new boilers were put in, and she was lengthened from 209 to 285 feet. As a paddle-wheel steamer, the speed of this vessel was but 9 miles per hour. but as a propeller her speed is 12 knots per hour. This affords some positive proof that the screw is the prince of propelling devices.

Preserving Wine.

Sulphur is sometimes placed in the bottles or casks containing wine, to preserve it, and often in such large quantities as to give it an unpleasant flavor. Should this sulphur contain arsenic, as it often does, in small quantities not enough to poison, it gives the partaker aches and pains for which he cannot account. Cloves, cinnamon, lavender, thyme and other aromatic substances are used to destroy the taste, but all artificially flavored wines should be carefully avoided, as they are usually added to disguise something either dangerous or nauseous.