# Scientific American.

## Aew Inbentions.

20

#### Cure for Bronchitis.

One of our cleverest and most reliable friends, says the Holly Springs Herald, informs us that common mullen leaves, smoked in a new pipe-one in which tobacco had never been used-is a sure and certain cure for bronchitis. The remedy is simple and innocent, and within the reach of all. Recollect that this is not the remedy of a retired physician whose sands of life have nearly run out, but is given to us by one who has tried it himself and seen it tried with others, and has never known it to fail in effecting a permanent cure. The remedy is simple, and we can certainly discover no harm likely to arise from a trial.

#### A New Material for Molds.

M. Buhring has recently obtained a patent in England for manufacturing carbon, and it is proposed to introduce an important improvement in the casting of metals by substituting compressed carbon manufactured by his process for the sand or clay usually cmployed, Corbon thus formed is comparatively pure, and can be molded into any shape and form required, and the advantage derived from its use is, that the same material may be used over and over again without injuring the smooth surface of the cast material. The same material has been successfully applied to the manufacture of crucibles are by many considered superior to any others. Another purpose to which the compressed carbon is applicable is the manufacture of battery plates, and it is anticipated that electric telegraph companies would effect a vast saving in the cost of their batteries by employing carbon in connection with iron instead of zinc and copper plates now used.

## Fireproof Garments.

Some experiments have taken place at Paris to test a contrivance for protecting firemen from the action of the flames, and enabling them to resist a strong degree of heat. It consists of gloves made of amianthus-a kind of filamentous mineral-a helmet of the same material, fitting into another of wire gauze, and a shield of suitable dimensions, besides other garments of the same kind of materials. Three firemen, having put on the gloves, were enabled to carry iron bars, at a white heat for three minutes, without being obliged to let go their hold. Straw was afterwards set fire to in a large cast iron cauldron, and continually kept up, while a fireman wearing the double helmet, stood above the flames, which he warded off with the shield, although they were at times above his head, he was enabled to keep his post for a minute and a half, at the end of which time his pulse, which was 72 before the experiments, had risen to 152. Another fireman followed who, having covered his forehead with a piece of amianthus, was enabled to resist the flames for three minutes and forty seconds.

## Improved Seed Planter.

The seed planter has become in this country as peculiar an institution and as distinctive a characteristic of our agricultural nationality as any one of our personal characteristics; and so strongly is this felt among our inventors that they are always, with right good will,

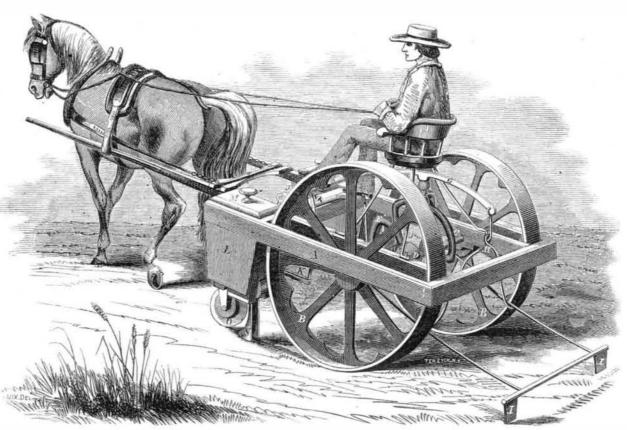
F is a friction roller that moves over the cams, E, and being rigidly attached to the bar, G, elevates or depresses it at regular intervals, determined by the shape and arrange-

end of rows, the cam, E, will not be moved. raised or lowered by the motion of G, thus covering the seed in parallel hills; the other end of G is contected to a bar, J, that runs parallel with the front of the machine, at each end of which it is supported in small

when the machine is backed or turns at the | tached by a link, H, the coverers, I, that are | link attached to the axle of the distributin g roller, b,-seen better in Fig. 2, which is a section of the planting device. L is the see d box, with its cover, M, planting share, N, an d rotary colter, O.

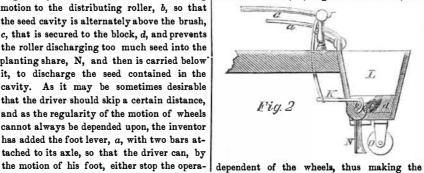
The operation is as follows :- As the mament of the cams, E. To one end of G is at- standards, that serve as journals. K is a chine is drawn along, the motion of the bar

## **MOREHOUSE'S SEED PLANTER.**



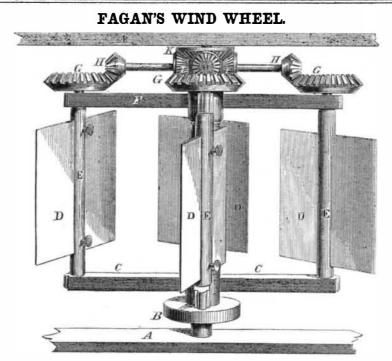
G, gives, by a series of link-work, an oscillating , tion of the links, K, or give them motion, in-

motion to the distributing roller, b, so that the seed cavity is alternately above the brush, c, that is secured to the block, d, and prevents the roller discharging too much seed into the planting share, N, and then is carried below it, to discharge the seed contained in the cavity. As it may be sometimes desirable that the driver should skip a certain distance. and as the regularity of the motion of wheels cannot always be depended upon, the inventor has added the foot lever, a, with two bars attached to its axle, so that the driver can, by



planter automatic or not, as may be required. It is very simple and compact, and any further information can be obtained by addressing the inventor as above.

CEMENT FOR BROKEN CHINA .- Take a very thick solution of gum arabic dissolved in water, and stir into it plaster of Paris until the mixture becomes a viscous paste. Apply it with a brush to the fractured edges, and stick them together. In three days the article cannot be broken in the same place. The whiteness of the cement renders it doubly valuable.



tom of this project four arms, C, at right angles to each other, and from the top corresponding arms, F, also project. These arms form a kind of framing between which the shafts, E, are placed in a vertical direction having the sails, D, attached to them, and secured by set screws, as seen in the engraving. On the top of each shaft, E, is a bevel wheel, G H, gearing into another, on the shaft of which is another bevel wheel, I, gearing into a stationary bevel wheel, K, connected with the frame, and into the center of which the axle, B, is stepped. From this description of the parts it will be seen that the rotation of the sails, D, on their shafts, E, is governed arbitrarily by the gearing, G H I K. The several wheels comprising this gearing are made of such size relatively with each other, that the wings or sails will make just half a revolution on their shafts o one revolution of the wheel, and each pair

endeavoring to improve and extend the ap plication of the machine.

Our illustration is a perspective view of a recent valuable improvement in this class of agricultural machines, invented by William Morehouse, of Davenport, Iowa, and patented by him June 22, 1858.

A is the frame, mounted on two wheels, B, on the axle, C, on which are cams, E, that can move freely around it. These cams are secured to a ratchet toothed cam, D, and a corresponding ratchet catch, D', is secured to c, so that when the machine moves forward, | in the one direction to rotate them, and the the teeth of the catches will fasten into each other, and the cams, E, will be rotated, but | other. Such an arrangement has been in-

0

No wheels whose sails are arranged vertically will operate without they have some arrangement by which they can be made to present a full face to the wind on the one side, and their edge to the wind on the other, so that the full force of the wind may be exerted sail may offer very little resistance on the capable of turning in the frame, from the bot-

vented by J. C. Fagan, of Victoria, Texas, and he has applied for a patent.

Our illustration is a perspective view of this wind wheel, and fully shows the invention, which is as simple as it is perfect, theroughly obtaining the end desired. A A is a framing, between the top and bot-

tom pieces of which, a standard, B, is erected,

of sails is so placed that while on one side the full face of the sail is presented to the wind, on the other the side of the sail only meets the breeze, and offers little resistance to the wind as it passes through and against it. In this wind wheel the usual slamming and jar occasioned by the rudder adjustment of the sails by the wind is avoided, and as the direction of the force changes, the sails can be brought into a proper relative position by moving the wheel by means of a lever.

It is therefore in every way perfectly automatic and regular in its action, and any further information can be obtained by addressing as above.