

IMPROVED CORN PLANTER.

The inhabitants of our western prairies understand the cultivation of Indian corn better than it is understood in any other part of the world. A person may ride among those square miles of waving verdure without ever seeing a crooked row of corn, or a single short row at the edge of the 160-acre fields; with such engineering accuracy do these farmers lay off their ground. And while the corn is growing, one man with a double shovel plow will keep 20 or 25 acres perfectly free from weeds, notwithstanding that weeds grow with surprising vigor in that fertile soil. In order that corn may be cultivated thus perfectly with so little labor, it is absolutely necessary that it should be planted in rows both ways, and many attempts have been made to devise some machine which would do this. Twenty years ago we ourselves expended considerable inventive effort upon this problem but without any really valuable result. The accompanying cut represents a machine which accomplishes the thing to a degree of perfection, though it takes two persons to operate it, and requires that the ground should be previously furrowed in one direction.

A frame is supported upon two broad wheels which are placed the proper distance apart for two rows, and carries two hoppers for the seed on its forward part, in front of the wheels. One long slide passes through the bottoms of both hoppers, and is furnished with two holes near each end for measuring the seed and feeding it down into the shoes which open the furrows. This slide is worked by means of the lever, *d*, the attendant boy forcing it along at the instant the heel of the shoe is the middle of the furrow which is being crossed. This motion passes one of the holes, *c*, with its measure of seed under the stationary scraper, *e*, and over the opening, *b*, by which means the proper number of seed for one hill is dropped down into the hollow shoe, *h*, near its bottom, where the seed is arrested and retained by the slide, *k*, Fig. 2. This slide is a thin plate, and, passing through the bottom of the hopper, has a projecting pin, *n*, near its upper end. This pin passes through the angular slot, *i*, in a plate fastened upon the slide, *b*, so that when this plate is moved horizontally with the slide, *b*, the slide, *k*, is momentarily raised, allowing the charge of seed which it retained to fall into the furrow. At the same time another supply of seed is dropped down into the hollow shoe where it is caught by the return of the slide, *k*, to its place and held till the furrow is reached for the succeeding hill.

The frame on which the working parts rest is made independent of the frame to which the wheels and pole are attached, and is hung on pivots, so that the driver by moving backward upon the long seat on which he sits astride, can raise the shoes out from the ground—a convenience in turning round at the ends of the rows, and in proceeding to or from the field. In front of the shoes, *h*, are the wheels, *o*, made in the form of double cones, to prepare the ground for more complete opening by the shoes, *h*. The carriage is supported by the broad wheels which keep it from sinking into the soft plowed ground, and which follow the planting, covering the seed and pressing the earth around it.

The patent for this invention was granted through the Scientific American Patent Agency, Dec. 13, 1859, to William H. Worth and Leonard Finlay, who have sold a one-half interest, and persons desiring further information in relation to the matter will please address Rees, Worth & Co., at Canton, Mo.

THE EFFECT OF PATENTS ON THE PRICE OF MANUFACTURED GOODS.

In our last number we announced the fact that the Commissioner of Patents had rejected the application of

time in the exclusive enjoyment of their inventions, by the grant of Letters Patent, they would not be so foolish as to spend time, money and mental toil in effecting improvements that could and would be afterwards appropriated by any person, without cost or labor. And as it requires quite a large capital to engage in most new manufacturing operations, capitalists would not invest money in expensive new undertakings of this character, unless they enjoyed protection until once they had fully established the business. The consequence, therefore, would be that they would not invest, and we should not have such manufactures at all. Take the very patent of the carpet power-loom, and we have no hesitation in asserting that, had it never issued from the Patent Office, the loom would not yet have been in operation; and all carpets would still be woven by hand, and the high prices thus maintained. We are positive that the public cannot obtain cheaper carpets on account of the Commissioner's recent decision; because patents do not keep up high prices. But even allowing that they do so, then, as Mr. Bigelow has several other patents on different parts of carpet power-looms, and as these will remain in full force a number of years longer, of course the old prices must still be continued on this very account; so that the correspondent of the cotemporary to whom we have referred has no grounds—on the one hand or the other—for entertaining the opinion he has expressed.

THE NEW COMMISSIONER OF PATENTS.—Hon. Philip Frank Thomas, of Maryland, was confirmed on the 15th inst., as Commissioner of Patents, and has entered on the discharge of his duties. We trust that the Commissioner will find his new duties agreeable, and that he will show, at the outset, a generous and steady interest in the Inventor and the Patentee.

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Fig. 1

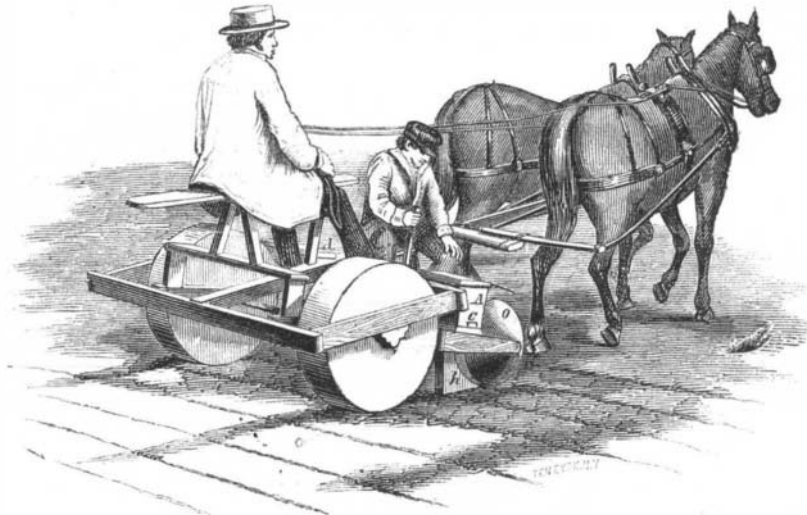


Fig. 2

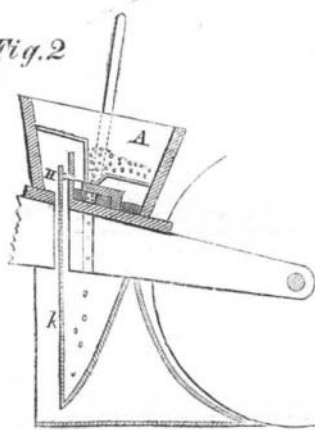
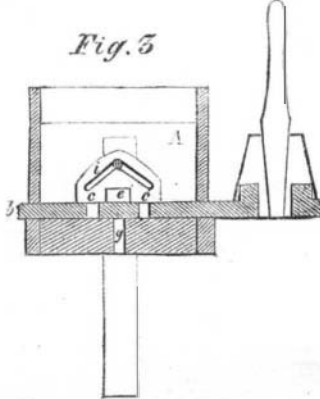


Fig. 3



WORTH'S CORN PLANTER.

E. B. Bigelow, for an extension of his patent of February 18, 1846, for an improvement in power-looms for weaving ingrain carpets. We do not propose now to discuss the merits of that decision. Our object is to notice a statement made by a correspondent of one of our city cotemporaries, wherein he asserts (as a ground of justification for the Commissioner's rejection in this case) that "ingrain carpets will no doubt be sold cheaper in consequence." Such a statement is not founded upon fact; it is simply an opinion, but one which, nevertheless, requires correction, as it suggests the idea that its author (and perhaps many others) entertains the notion that articles—such as carpets—manufactured by patented inventions are higher in price as a consequence of such patents. The public should be disabused of such an absurd notion, for it is wrong in essence and principle. The very first thing which a patented improvement in a machine effects is a reduction in the price of the articles manufactured by it. This has been the case with the carpet power-loom. The dyes and the wool of carpets are as high in price to-day as they were before this loom was put in operation, but carpets are 10 per cent. cheaper, at the very least, and this reduction in price has been effected by the economy of labor accomplished by machinery.

There is another wrong idea prevalent in the minds of many persons in regard to patents, which also requires correction. They believe that, as patents secure an exclusive right to the manufacture, sale and use of certain articles, this is a monopoly which keeps up prices, and that if no patents were granted, such articles would be much cheaper. The fact is that, but for patented inventions, most of the improved manufactures which are now produced by machinery would be vastly dearer than they are, and many of them would not be in existence at all. If inventors were not protected for a certain period of