

Seventh, The adjusting shoe, E, constructed and operating in the manner set forth.

Eighth, The arrangement of the castor wheels, d and d d, with adjustable connecting bars, in relation to the finger-bar, platform and frames of the machine in the manner and for the purpose substantially as described.

WASHING MACHINE.—H. E. Smith, of Philadelphia, Pa. Patented Oct. 26, 1853: I claim, first, The vessel, B, with its yielding valve diaphragm, J, and the perforated diaphragm, I, or its equivalent, in combination with a pipe, G, communicating with the vessel at a point above, and the pipe, H, at a point below the said diaphragm, and both pipes communicating with any suitable heating apparatus, substantially as and for the purpose set forth.

Second, The reciprocating plunger, C, with its enlarged end constructed as set forth, namely, with the recess, m, flanch, n, and perforations, p, in combination with the yielding diaphragm, I, for the purpose specified.

Third, Providing the plunger, C, with an upper enlargement, q, concave on the under side, and arranged in respect to the lower plunger, substantially as and for the purpose set forth.

ADDITIONAL IMPROVEMENTS.

ARITHMOMETER FOR ADDITION.—Orlando L. Castle, of Upper Alton, Ill. Patented Nov. 2, 1858: I do not claim the use of any particular kind or arrangement of keys.

But I claim the combination of the rocker keys and shifting pawl, in any equivalent manner, and for the purposes set forth.

MACHINE FOR DRESSING MILL STONES.—Simon W. Draper and R. M. Draper, of South Dedham, Mass. Patented May 13, 1856: We claim the bed-piece, A, with the cam, B, bar or lever, C, and rods, p, attached, provided with springs, r, in combination with the frame or carriage, D, with pick shaft, i, attached, provided with the forked arm, e, the whole being arranged to operate as and for the purpose set forth.

[This invention relates to improvements in a machine for dressing mill stones, patented to these inventors May 25, 1853, and the date above, and the object is to obtain a greater length of traversing movement of the pick over the face of the stone without changing the position of the bed-piece.]

DESIGN.

STOVES.—G. Smith and H. Brown, (assignors to North, Chase & North,) of Philadelphia, Pa.

Explanation.

The columns of the last number of the SCIENTIFIC AMERICAN were so overcrowded with the Patent Claims, that we had not space for our usual miscellaneous topics. The official copy of these Claims only reached us last week, on the day we ordinarily go to press, and therefore too late to enable us to prepare a supplemental sheet. These remarks also apply to the present issue, but we shall endeavor to make up the deficiency to the full satisfaction of our readers before the close of the volume. We hope that in future the Patent Office will be more prompt in furnishing us with the official List of Claims.

New Stove.

Mr. T. J. Whitehead, of South Paris, Me., has invented a new stove, which confines all the heat during the summer season and thus saves fuel, and facilitates the cooking or baking operations. It is a good stove for southern climates and even northern ones during the summer months, as it enables cooking to be performed without heating the room or inconveniencing the cook. In winter it can be arranged to warm the apartment as well as cook. It was patented March 29, 1859.

New Corn Husker

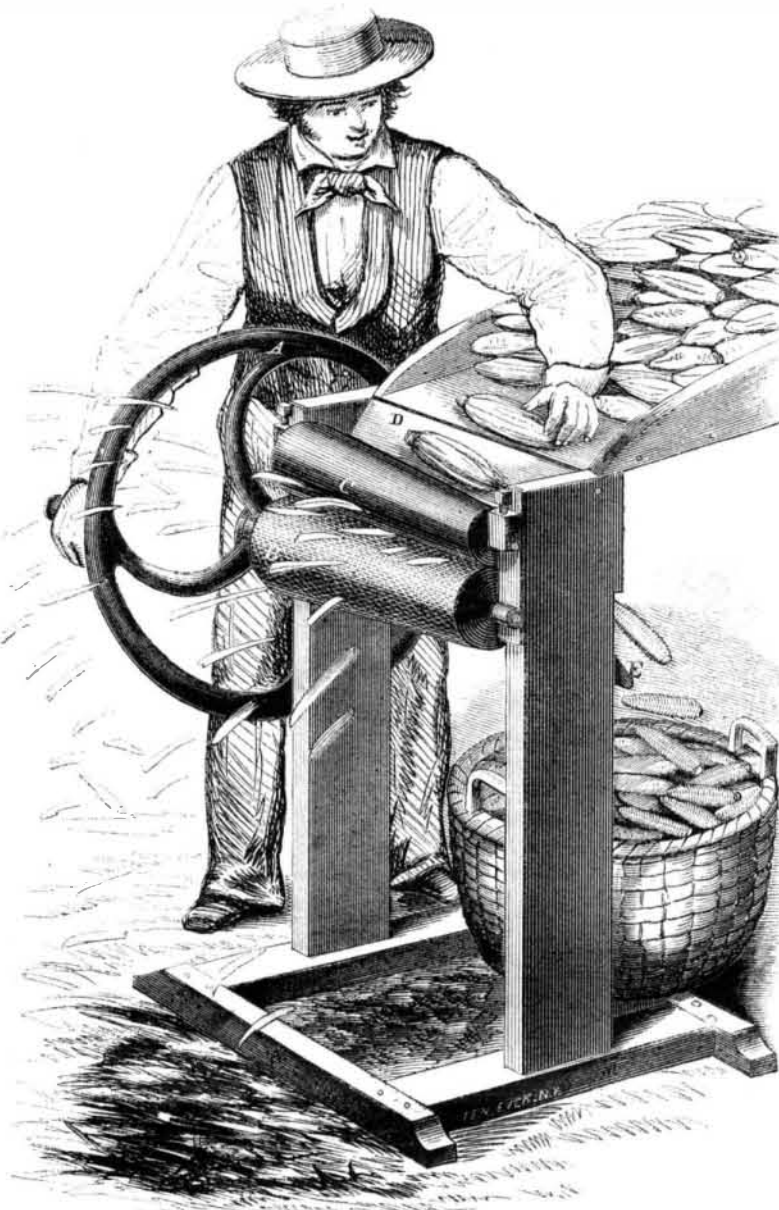
When one watches a husking party—either one that means pleasure or one that means work—the impression left on the mind of the beholder is that it is a very simple and easy thing to do; but it is really difficult and slow. It is therefore with a feeling akin to astonishment that the same person would look at many of the machines which have been devised by the ingenuity of inventors to perform the same operation. "Is it possible" such an individual would inquire "that it can take so much machinery to do so simple a thing?" And the only answer that could have been given would be a half melancholy "It seems so." We are happy, however, to describe a corn-husker that is really simple, as an inspection of the above engraving will at once convince the reader, in fact it is so simple that there can scarcely be said to be any description about it.

A small frame of rectangular form is the stand from which rises two uprights carrying between them a conical roller, C, and a toothed cone, B, laid the one on the other in elastic journals, their narrow ends together. The cone, B, is roughened or studded with small spikes and is formed of cast iron; the roller, C, is nearly or quite smooth. On the axle or arbor of B is a crank and fly-wheel, A, by which the device is operated, the fly-wheel enabling a good speed to be attained. An inclined board, D, is placed between the feeding board and the rollers, this is placed between the sides so as to swing freely up and down. The operation is so easy that any

one can use the machine. The ears of corn are placed with butts lying in the same direction and they roll down the board to the rollers which, catching hold of the husk,

SPEAR'S CORN-HUSKER.

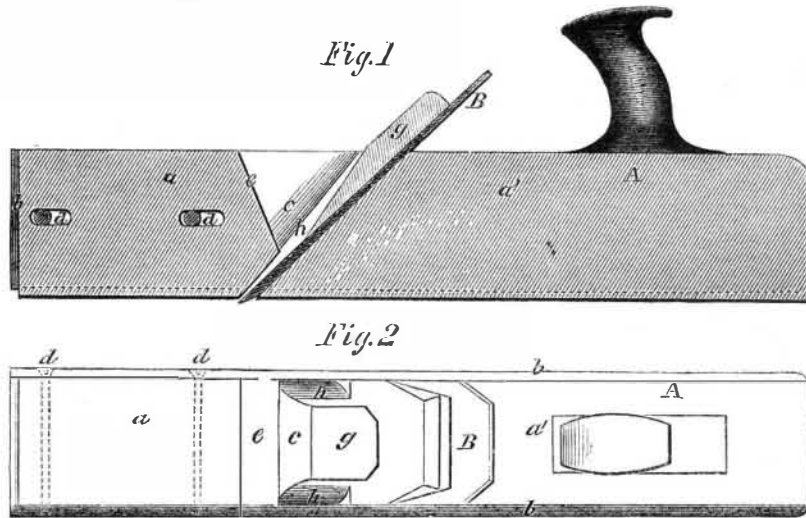
pull it cleanly off; and another ear coming down the yielding board, depresses it, and allows the husked ear to fall down the shoot, E, into a basket or other receptacle, while the



unhusked one takes its place and is very rapidly husked. This machine in no way injures the corn, but leaves the ear perfectly free from husk or fiber ready for the market or the mill.

The inventor is N. T. Spear, who may be addressed at room 18, No. 37 Park-row, New York, for further information. It was patented Sept. 14, 1858.

GORHAM'S IMPROVED PLANE.



The stock of this plane is formed of wood with metal sides, and the front part is made adjustable by means of set screws, so that the "throat" may be enlarged and contracted at pleasure, as the nature of the work may require. Its construction will be fully understood by the following description and the accompanying engraving, in which Fig. 1 is a longitudinal vertical section and Fig. 2 is a plan or top view of the plane.

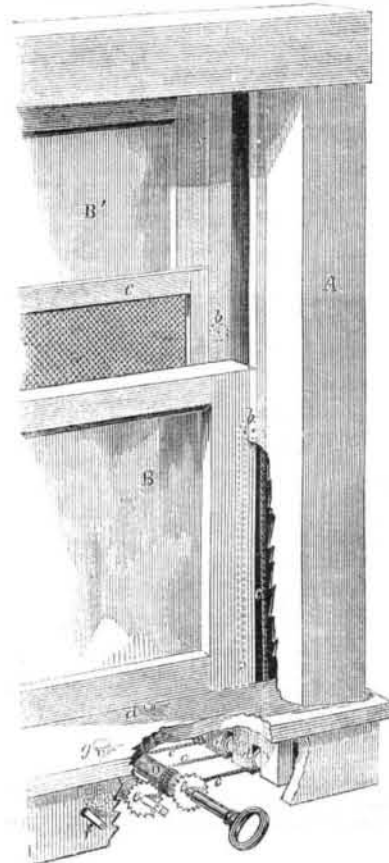
A is the plane stock which is formed of a wooden center, a a', with a metal plate, b, on

each side. The back part, a', is permanently attached to the metal plates, b, but the front part is allowed to slide longitudinally between the plates, b, and nearer to or further from the part, a', as may be desired; a being secured at any point by set screws, d. The throat, c, of the plane is formed between a and a' the front part of a' being doubly inclined as seen at e. The lower edges of the metal sides, b, do not extend down to the bottom of the wooden portion, a a', of the stock, and consequently the bottoms of the

wooden portion constitute the "sole" of the plane; the iron, B, is of the usual form and is secured in flanges, h, by a wooden key or wedge, g. From this description it will be seen that the plane may be very readily constructed, much more so than if made wholly of wood as is usual. The throat, c, is formed without difficulty and its orifice at the cutting edge of B can be contracted or enlarged as occasion may require. The plates, b, may be of cast metal and the stock of beech or of other wood.

The inventor is Jackson Gorham, of Bairdstown, Ga., from whom any further information may be obtained. It is patented this week and the claim will be found on another page.

Huey's Window Sash.



Our engraving represents a device invented by Wm. Huey, of Christiana, Pa., and patented by him Feb. 15, 1859, for the purpose of easily elevating window sashes and retaining them at any desired points in the frames.

A is a window frame made as usual, except at the base, which is also boxed to allow of the arrangements afterwards to be described being placed therein. The window frame has three grooves containing an upper and lower sash, B B', carrying a plate of glass each, and between them another sash, C, holding a wire gauze or fine network screen; this is very useful, as in summer the top sash can be let down or the lower one raised, and the gauze moved to replace it, so that all the delights of the cooling breeze can be experienced without there being any fear of insects or dust entering the apartment. The bottom sash is held in place by a small catch, a, which has to be drawn back when it is raised. In the frame are small pulleys, b, at varying heights to suit the respective sashes; and cords, c, attached to the underside of B, B', and C, and lying in grooves in their sides pass over them and under other pulleys, d, at the corners of the frame. The cords, c, are secured to small arbors or drums, D, which are provided with ratchet wheels, e, and a square arbor, f, by which a key can be used to operate them. A spring catch operated by a knob, g, retains the sashes in any position in which they may have been brought by the key and drum. It is not necessary that all the drums should be arranged as shown, one can be at the bottom and one at each side, or in any way that fancy or convenience may dictate. The other side of the sash is exactly like the one shown, and the cords of both sides being drawn equally, the sash is evenly elevated.

Any further particulars can be obtained by addressing the inventor as above.