

## New Inventions.

## Witherell's Monkey Wrench.

The accompanying cut represents a very convenient wrench, patented by O. O. Witherell, of Danville, N. H., on the 2d of December last. It is capable of assuming either the novel condition in which it is represented serving as a fork wrench, or of being changed to the general form of an ordinary screw wrench.

A is the handle, and B the shank fixed thereon. C is a spring riveted to one side of B. D is a crooked lever influenced by the spring, but which can be readily operated by the thumb. E is what may, but with ques-



tionable propriety, be termed the fixed jaw. F is a pin, by which E is secured to B. G is the movable jaw, and G' a sufficiently long rectangular shank, which passes freely through a corresponding opening in E. The lever, D, is urged by the spring, C, into such position that it pinches and holds the shank, G', very firmly in its position.

In order to change the wrench to the form of an ordinary one, in which the jaws, E and G, project from the side, it is simply necessary to apply the thumb to D, and remove the part G altogether, after which the jaw, E, may be turned quarter of a revolution on the pin, F, and G again inserted. The space between E and G may also be increased and diminished at pleasure after simply depressing D.

For further particulars the inventor may be addressed as above.

## Improved Hominy Machine.

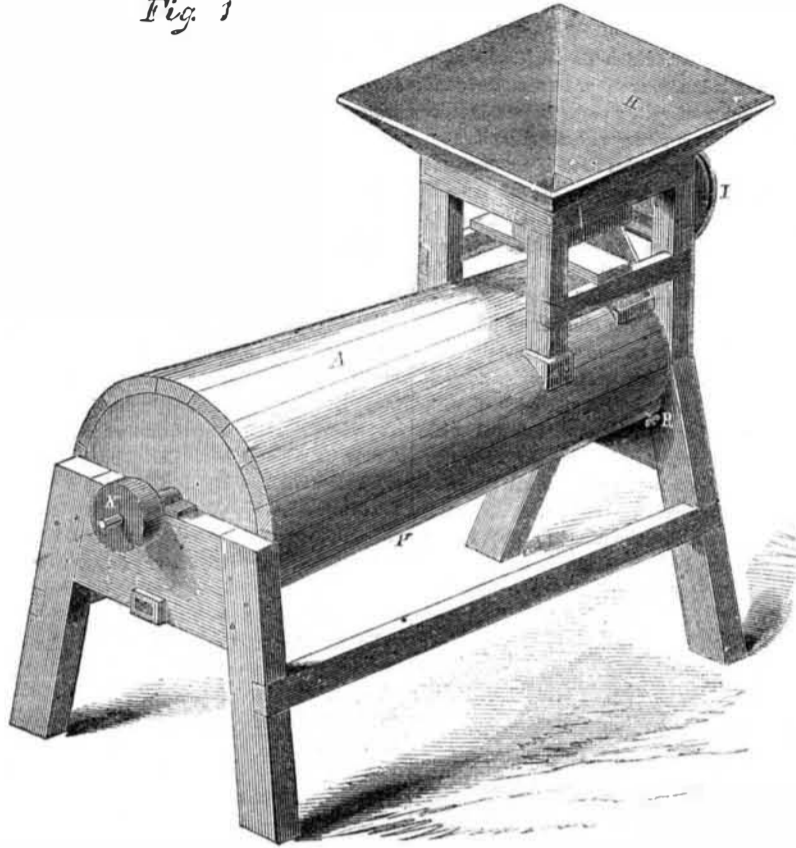
Hominy is a favorite dish with many, especially in the Western and Southern States, and a simple machine which will hull and clean the corn without breaking or mashing the grains is a valuable invention. The invention here represented does this with such perfection that the dish of hominy, when properly cooked, much resembles the white swelled surfaces of nicely prepared pop corn.

The grains are fed into the small end of an horizontal and slightly conical case, on the interior of which is rapidly revolving a drum of somewhat smaller diameter. The drum is covered with projections or beaters, and the interior of the case is provided with nearly continuous rings extending inward nearly or quite to the surface of the drum. The grains under the action of the beaters, and aided by gravity, gradually work through the space

provided by the want of continuity of the rings, and finally escape thoroughly hulled at the large end of the machine.

## MAYHEW'S HOMINY MACHINE.

Fig. 1

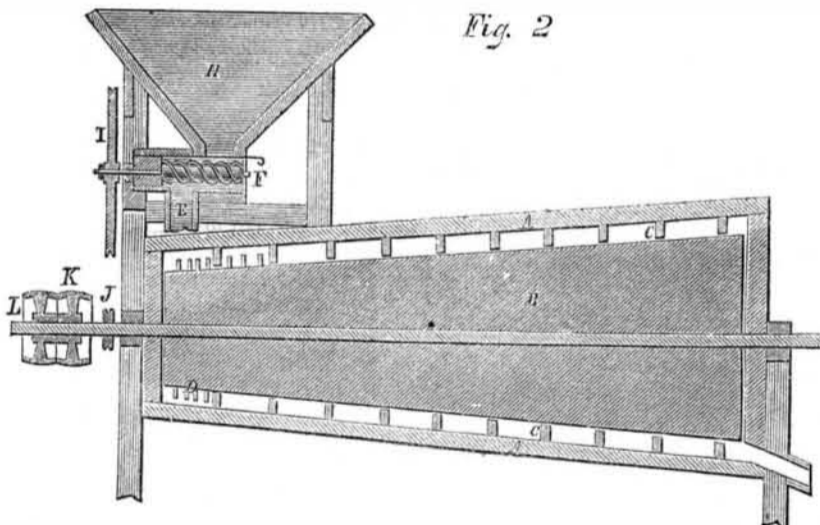


parts. A is the case or concave which may be of wood in either one or two thicknesses lined with metal. B is the drum or conical "cylinder," and C the rings fixed in A. N. Fig. 3 shows the opening in C through which the grain finds its way at a proper rate, regulated by means explained below. D represents the pegs or beaters which are only shown

Fig. 1 is a perspective view of the machine complete; Fig. 2 a longitudinal section, and Fig. 3 a transverse section of the important

## MAYHEW'S HOMINY MACHINE.

Fig. 2



and loose pulleys on the shaft of B, by which it is driven. F' is a screen through which any dust may be discharged. P represents an

adjustable strip let into the lower side of the case A, and on which are fixed plates O, so that when P is raised by the thumb screws, R, to its highest position, the plates O nearly or

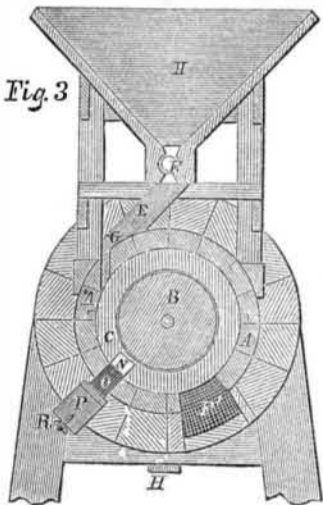
quite stop all the openings, N, in the rings C. By lowering P to the proper extent, the grain may be allowed to pass from the small to the large end of the machine as rapidly as may be desired.

## Treatment of Gutta Percha.

This invention was patented on the 2d of June last. For further information, address the patentees, Messrs. Weeks & Mayhew, Indianapolis, Ind.

E. Rider, has made a new improvement in the treatment of gutta percha, by the addition to sixty-six parts of that gum, of one part of sulphur; and one part of litharge, prior to the exposure of the same to the action of from 235° to 245° Fah. for the purpose of expelling the volatilizable ingredients therefrom, and the after process of vulcanization of gum so prepared by subjecting the same to a heat of from 255° to 265° Fah.

Fig. 3



quite stop all the openings, N, in the rings C. By lowering P to the proper extent, the grain may be allowed to pass from the small to the large end of the machine as rapidly as may be desired.

M. Doyere, of Paris, has proposed a method of keeping grain sweet and undecomposed for any length of time, by subjecting it to the action of the vapors of a volatile liquid called the bi-sulphide of carbon.

## American Ingenuity.

Last week we published a list of five cases for which petitions are now before the Patent Office, asking that certain patents may be extended for a period of seven years. By reference to the last number of the 12th volume of the SCIENTIFIC AMERICAN, it will be seen that twenty-six patents were extended during the past year; thus showing that, although many inventions prove unprofitable, and oftentimes, perhaps, for want of proper management, involve their originators in a complication of disasters, yet, in a majority of cases, we are inclined to think that the patentee either parts with his right for a snug sum of money, or engages in the manufacture and sale of his improvement, and thereby secures for himself not only a good, but also a profitable and permanent business.

The fact that so many patentees are always anxious to get their patents extended, goes to strengthen the position we have assumed, that patented inventions are not by any means so generally unprofitable as many suppose. A cotemporary justly remarks, that notwithstanding a prevalent opinion to the contrary, so "many inventors have acquired ample fortunes by their science, skill and intellect, that every poor man with a taste for mechanics hopes to meet with equal good luck. The earliest inventors undoubtedly had rather a hard time of it, but they were few in number; however, they must be honorably regarded as pioneers. Still, even in the infancy of discovery, many able men were amply repaid for their toil, not only in honor, but in hard cash; and in these times, the originator of a labor-saving or money-saving machine of merit—a machine which does really save labor and money, and actually reduces the cost of social necessities—is pretty sure, if he be decently prudent, of liberal compensation for his pains. Most prominent inventions of a thoroughly useful character, made in this country, have amply repaid their originators, whether they were those of a self-acting mule, a revolving pistol, a carpet-loom, a coal-burning locomotive, a reaping machine, or a rotary press. This fact undoubtedly stimulates ingenuity, but this will not alone account for the requisition which this country makes upon its inventive talent. It is because we have an immense demand for manufactured cotton, that we have brought the machinery necessary for its production to perfection; and it is because we have great crops, defying the profitable use of the scythe or sickle, that we have the beautiful machines which now so wonderfully facilitate the operations of agriculture."

The statistics of the Patent Office alone show something more than that we are merely an ingenious, contriving set of whittlers and jack-knife adepts. It is true, however, that there is always a class of more or less really ingenious men, who are continually racking their brains to construct "perpetual motions," "flying machines," and inventions of like character, without the slightest probability of success, when, if the same amount of time was spent in scheming out useful improvements, such men would undoubtedly accomplish some good object for themselves, and confer an equal benefit upon the community.

## The Awards for Reaping Machines.

The following are the awards for the reaping machines at the trial at Syracuse in July last:—C. H. McCormick, Chicago, gold medal; Walter A. Wood, Hoosic Falls, N. Y., silver medal; Warden, Brokaw & Child, Springfield, Ohio, bronze medal; and Jonathan Haines, Pekin, Ill., diploma.

For reapers and mowers combined, the following awards were made:—Walter A. Wood, Hoosic Falls, N. Y., gold medal; Dan. Osborne, Buffalo, silver medal; Warden, Brokaw & Child, bronze medal.

The awards for mowing machines have not yet been made.

Judge Curtis has resigned his seat as one of the Justices of the United States Supreme Court. He is an able lawyer, and well versed in the knowledge and practice of the patent law.