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IN ADVANCE.

Improved Hominy Mill.

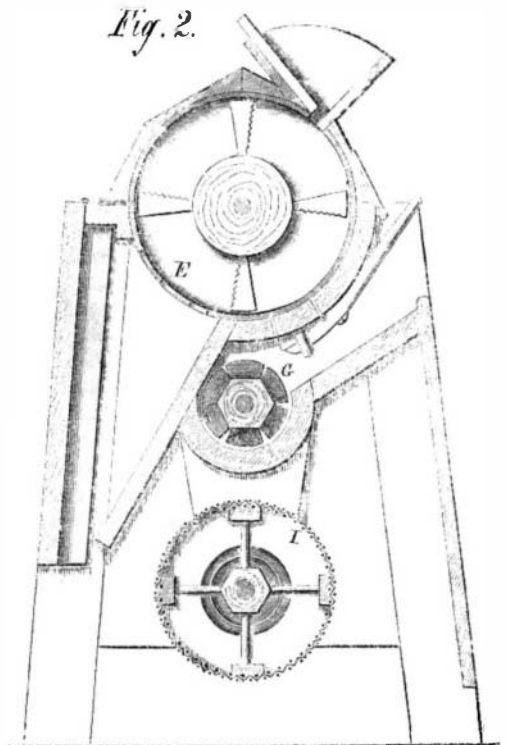
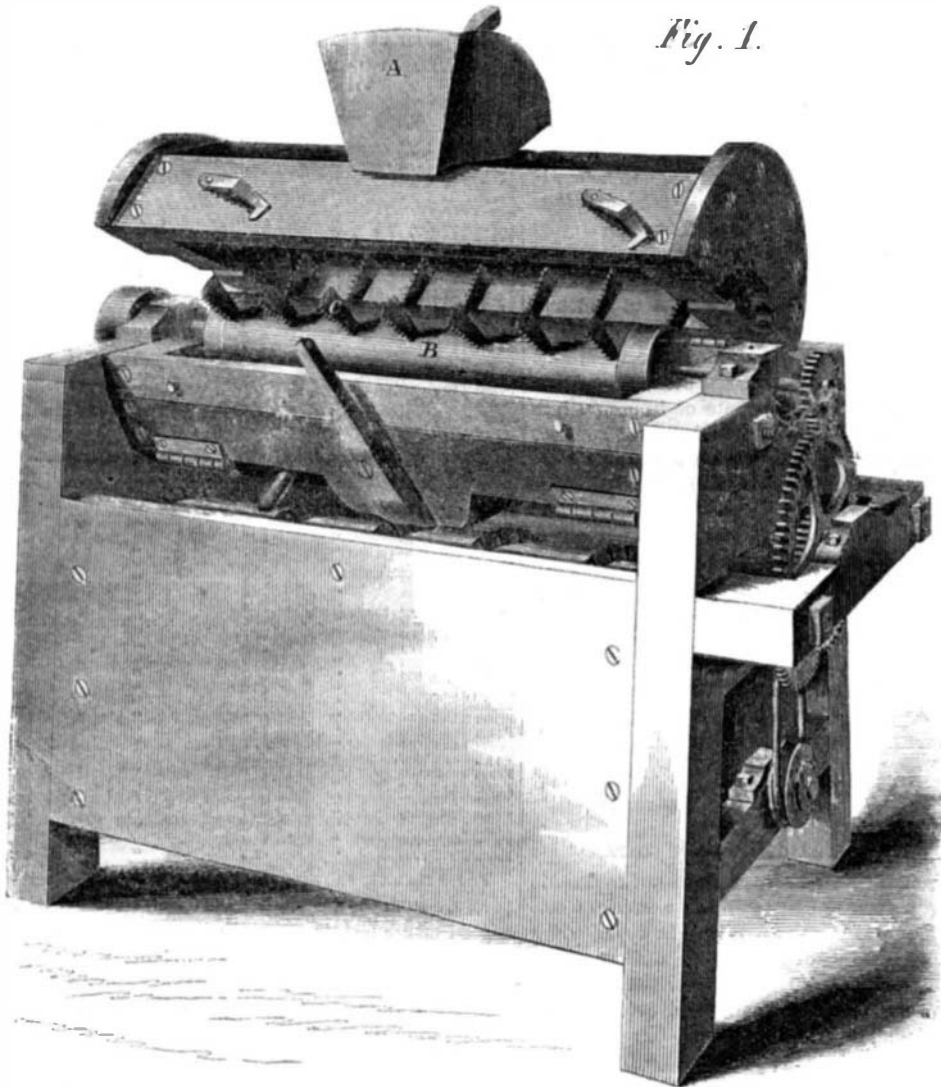
This mill is intended to crack or break corn for hominy, and differs from most mills for that purpose constructed heretofore. The object is to reduce the corn evenly, or divide it properly, so that it shall be all of one size, free from small grains or fine flour, which are likely to breed worms and turn sour.

In some hominy mills it is customary to cause the corn to flow continuously through the cracking apparatus, and it is asserted that this is an inefficient

hopper, is then acted on by these teeth and thoroughly reduced. In the process, any fine flour or smaller grains than the regular size, falls through the slots, E, Fig. 2, into any receptacle placed to catch it.

After the corn has been thoroughly broken to the proper size it is dropped into the conveyer, G, which is a quick-pitched screw. This conveyer being set in motion by the gears, H, slowly moves the grain forward into the screen, I, below where it is properly bolted and rendered fit for market.

hammers have been made, but none have yet reached the size of the one now in process of erection at the Bolton Iron and Steel Works. This hammer is being made by Messrs. Nasmyth and Company, of Patricroft, and is of gigantic proportions, and will strike a blow equal to 75 tons. This of course will require an immense anvil block, and the process of casting one for it, weighing 200 tons, on Wednesday last, was a work of unusual interest. The iron was smelted in two large patent upper tweek cupola furnaces, 24 feet in height and 7 feet in diameter. The molten metal was run into the molding in a constant stream, supplied alternately from each furnace. The process occupied ten hours. The metal was kept in a state of fusion by means of burning charcoal until the whole quantity was poured in. The anvil block measures 12 feet square at the base, and 12 feet 6 in. in depth. The figure is pyramidal, and it is cast base upwards. The metal contains a certain proportion of Bessemer steel. The casting was performed under the superintendence of Mr. Ireland, of Manchester. Large numbers of visitors were at the



JACKSON'S HOMINY MILL.

plan, for much of the corn passes through without being broken, thus causing an amount of labor to separate it afterward, which is unnecessary.

In this mill the corn is put in in charges; that is to say, a certain amount is put in the hopper, A, and subjected to the action of the crackers or breakers, B. These crackers literally cut the corn up, for they consist of a series of steel cutters, C, arranged on a shaft in rows, and wedge-shaped or widest at the heads. The working edges of these cutters are serrated or toothed, to give them more efficiency, and they are staggered or alternated in their positions with relation to each other, so that the spaces between them are very small, the cutters in one row coming opposite, or nearly opposite, the space in the other row.

The corn admitted to these cylinders through the

These combinations give this machine many advantages, and a patent is now pending on it through the Scientific American Patent Agency by the inventor, Andrew P. Jackson, of Memphis, Tenn.; address him at that place for further information.

Another Monstrous Cast-iron Anvil.

Some months ago we chronicled the fact that an immense anvil weighing 160 tons had been cast in Sheffield, Eng. Quite recently this enormous block has been exceeded in weight by 40 tons. The Liverpool *Albion* thus speaks of a huge cast iron block weighing 200 tons:—"The engineering science in its giant progress is constantly needing increased power in its appliances; and the massive forgings now required in ship-building necessitates steam-hammers of corresponding proportions. Many huge

works during the day, and were entertained at Incubation. The huge casting is not likely to be perfectly cold three months hence, and it will certainly not be reduced to a sufficiently low temperature to be dealt with under two months. When cool enough, it will be turned over, as already explained. The bed for the reception of the block will be enclosed in a large circular wrought iron cylinder, measuring 20 feet in depth and 18 feet diameter. This will be sunk in the ground and filled with concrete, and when finally deposited in its bed the anvil will appear about 2 feet 6 inches above the ground."

TARBOX'S SAD IRON.—The address of the patentee of this invention, illustrated on page 30, of the present volume, is New York city, not Wyoming, Pa., as given.