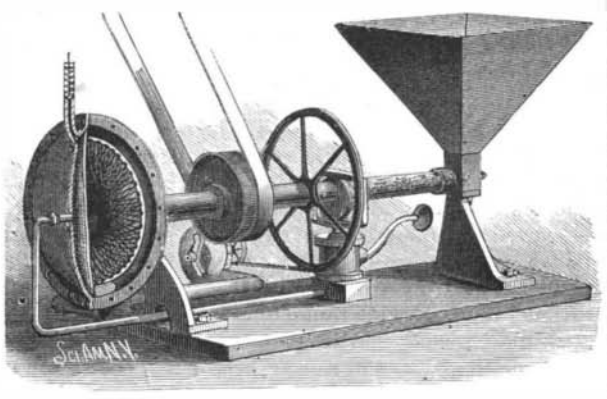
A MILL TO FREE RICE FROM ITS HULLS.

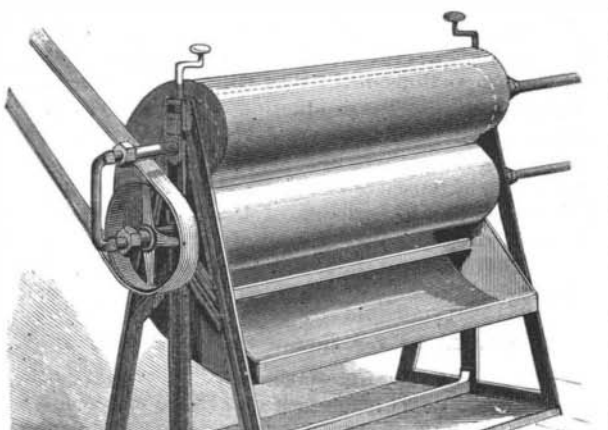
The invention herewith illustrated, which has been patented by Mr. John A. Lockfaw, of Wilmington, N. C., provides a mill designed to receive the rice as it comes continuously from the thrashing machine, and separate the grains or kernels of rice from the hulls. The central operating shaft is hollow, and as the rice is fed down the hopper it is carried along the inside of this shaft by a spirally flanged conveyer, shown in dotted lines, and delivered in the center of the casing at the opposite end of the shaft, the shaft carrying upon this end a disk with roughened surface. Just in front of this disk, and held at its edges by the flanges of the two sections of which the casing is made, is a flexible diaphragm, preferably made of heavy canvas. At the rear of this diaphragm, and opening centrally into the chamber in which it is situated, is a tube connected with an air pump operated by an eccentric on the main shaft, so that as the latter revolves, and feeds the rice forward from the hopper delivering it between the roughened disk and the diaphragm, there will be an air pressure at the back of the latter. This diaphragm is intended to be sufficiently yielding to prevent the rice from being broken as it is caught between the roughened face of the disk and the diaphragm, by which the hulls are stripped from the kernels of the grain; and in order to prevent too high an air pressure being kept up in the chamber, a safety valve is provided in the top of the casing, through which the pressure is regulated by the tension of a spring. There is also mounted upon the shaft a pulley which drives a fan, the blast from which is delivered in front of an opening near the bottom of the casing, out of which the rice and hulls fall when the mill is in operation, the hulls being thus blown off. It is said that this mill works well practically, and exceeds the anticipations of its inventor.



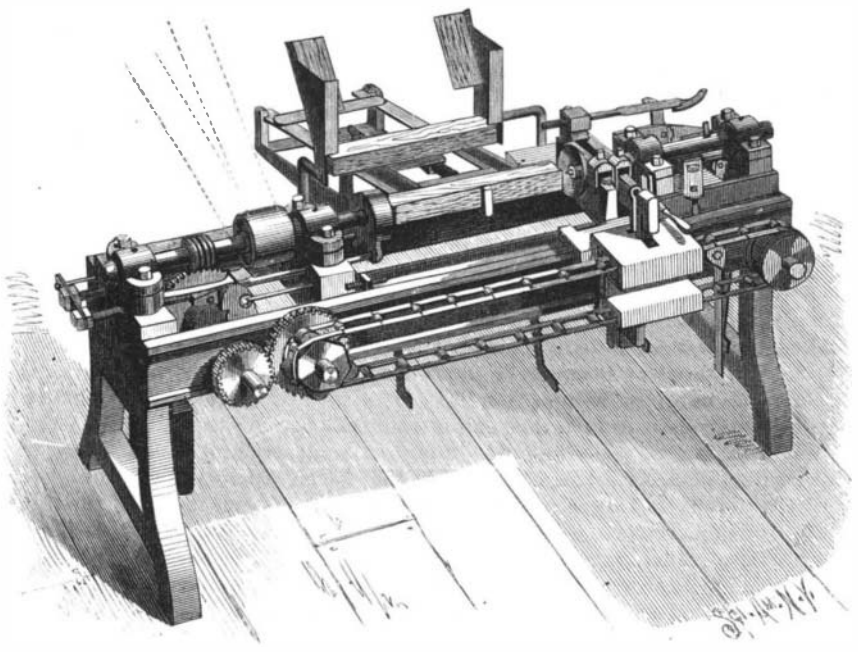
LOCKFAW'S RICE MILL.

A STEAM HEATED IRONING MACHINE.

The machine herewith illustrated is designed to facilitate the ironing of towels, napkins, table cloths, and other goods. It has two steam heated cylinders partly inclosed in a sheet iron drum, in which are two doors, by the opening or closing of which the goods are made to pass out at the rear of the machine or are returned to the front, as the operator desires. In ironing collars, cuffs, and similar articles, which may require to be passed several times through the machine, one of these doors is closed, so that the goods passed through on that side are returned to the front until the work is sufficiently ironed, when the articles are finally passed through on the other side and delivered through the other open door on the rear side of the machine. The ironing is effected by the hollow metallic rollers shown, which are operated by a belt from any convenient power, the journals of the rollers being tubular, for the entrance and escape of the steam necessary for properly heating the rollers, and any desired pressure is obtained by turning the small crank handles shown.



CORBETT'S IRONING MACHINE.



ROHLMANN'S WOOD TURNING LATHE.

For further information address the patentee, Mr. Frank Corbett, No. 354 Bowery, New York City.

AN AUTOMATIC WOOD TURNING LATHE.

It will be readily understood from the illustration how the power communicated through the driving pulley operates the lathe spindle and its mandrel, and the worm on the same shaft, through which motion is imparted to the sprocket chain seen in front, which moves the tool carriage. The latter is adapted to slide on guideways on the main frame, and carries two adjustable tools. It also has an upper and a lower pocket, through which pass the upper and lower parts of the sprocket chain, engagement of the tool carriage with either part of which--thus giving the backward and forward movement—is effected by the engagement of arms on the tool carriage with tripping arms on the main frame.

The rear part of the tool carriage actuates a feeding mechanism for placing the wood to be turned automatically in the lathe between the mandrel on the operating shaft and the opposite end centering spindle, the feeding mechanism being supported upon ways secured to the main frame, which also support a rack or hopper, in which the wood to be turned is placed. As shown in the illustration, the block to be turned is held by the feeder in position to be grasped and held between the end spindle and the mandrel on the shaft of the driving pulley. The forward motion of the tool carriage effects this by disengaging a pivoted latch, when a weighted bell crank lever throws the spindle forward, the spindle taking hold of one end of the block, while forcing the other end centrally on the mandrel opposite, and the block is rotated by the operating spindle. At the same time the movement of the tool carriage turns a forward projecting rod of the feeder, which had acted as an arm to hold the block in position, thus releasing the block, and, by another lever, the carriage which had fed the block up into position is caused to slide backward till its front is directly under the rack or hopper, when another block of wood slides down upon it.

As the tool carriage moves to the left, the cutting tools, properly adjusted, finish the turning of the block, when the chuck on the tool carriage comes in contact with the one on the operating mandrel, pushing the latter to the left, thereby disengaging one end of the turned block, and raising a weight which holds the mandrel in locked position, while a lug of the tool carriage operates a bar that forces the spindle at the other end to slide backward, disengaging the other end of the turned block, which then drops out of the machine.

On the backward motion of the tool carriage, a lug thereon engages a lever which causes the feed carriage to slide forward, with the new block of wood to be operated upon held in position to be engaged by the mandrel on the operating shaft and the opposite spindle, as at first. The tools are easily adjusted or changed, their position on the top of the tool carriage rendering them readily accessible, and the special manner in which the feeding mechanism is supported and operated holds its devices and the blocks being fed well out of the way, so that they will not interfere with the free working of the other parts of the machine.

This invention has been patented by Mr. Joseph Rohlmann, of 2001 Messaine Street, St. Joseph, Mo.

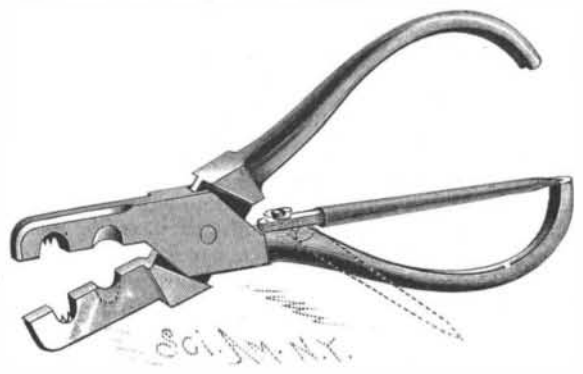
Do not Eat Raw Eggs.

In the *Monatschrift zum Schutze der Vogelwelt*, Professor Liebe adduces reliable data in answer to the question whether living worms are to be found in hens' eggs. A short time previously his sister had found a round, thread-like worm, the length of a little finger, in the white of an egg. It moved itself in a very lively manner. She at once took the white of the egg to a druggist, who put the worm in alcohol. Professor Mobius, of Kiel, decided that the specimen was an example of the thread worm of fowls—*Heteratis inflexa*—often found in the small intestine of the domestic hen. Only a few instances of the existence of the same in the white of the egg have been recorded.—*Allgemeine Medicinische Central-Zeitung.*

A MINER'S TOOL TO CUT FUSES, SET CAPS, ETC.

The invention herewith illustrated provides a combination tool for miners' use, to cut the fuse, fasten the cap thereon, and to make a cavity in the powder, when desired, for inserting the fuse and cap, preparatory to its being fired. Near the pivot connecting the blades of the plier like tool are half round openings or slots having curved cutting edges, by which the fuse can be squarely cut into two parts. Near the front end of the tool are half round openings having inwardly projecting tusks or prongs, and when the firing cap is slipped over the cut-off end of the fuse, and the tool applied thereto, these prongs embed themselves in the thin metal forming the sides of the cap and firmly clinch it to the fuse. Within the handle is pivoted a pin, which can be readily swung out, as shown in dotted lines, and forms a serviceable tool for making a proper cavity for the fuse in the powder.

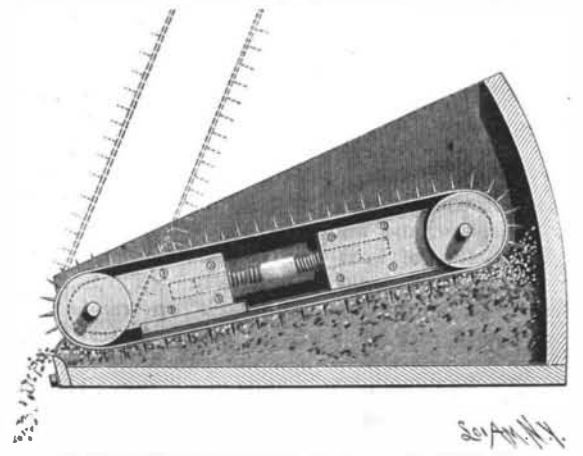
For further particulars relative to this invention, address Mr. C. D. Hale, patentee, or Mr. F. H. Cole, box 377, Leadville, Col.



HALE'S FUSE CUTTER AND CAP SETTER.

A DEVICE TO FEED THE SEED IN COTTON PLANTING.

Our illustration shows a hopper and seed feeding device therein which has recently been patented by Mr. Charles W. Oldham, of Mitchell, Ind. At or near the front of the hopper is journaled the crank shaft for operating the feed, the crank itself not being shown in our view, the shaft carrying a drum, and a block being attached to the shaft by cheek pieces. Connected to this block by a right and left hand screw rod is a similar block with cheek pieces, in the outer ends of which is journaled another shaft, carrying also a drum, the distance apart of the shafts being adjusted by turning the screw rod. Over the drums thus carried by these shafts is placed a feed belt carrying outwardly projecting teeth, which, as the crank handle is revolved, carry the seed from the hopper over a low projection secured to the front end of its bottom. The hopper is filled with seed by lifting out the frame and feed belt to the position shown in dotted lines, and in operation the belt and frame rest upon the mass of seeds, feeding from the upper surface and lowering in the hopper as the mass diminishes.



OLDHAM'S FEED FOR COTTON PLANTERS.