

Machine for Punching and Inserting Eyelets in Leather.

We illustrate herewith a very ingenious and important improvement in machines for punching leather and inserting eyelets therein, which surpasses in cheapness and efficiency anything of the kind with which we are acquainted, while it has all the elements of durability, freedom from complications, and ease of operation, which characterize a practical and useful invention.

It may be operated successfully by young girls, and punches a hole and inserts an eyelet at each stroke of a foot lever, with perfect uniformity, both in the width of space from the edge of the piece and in the distances between the eyelets.

The machine is one of those ingenious affairs which are only produced occasionally, and is worthy the attention of all who delight in curious mechanical contrivances, as well as those for whose use it is specially designed.

The eyelets are placed in a magazine, A, which moves with every motion of the foot lever. This magazine is divided into two compartments by a perforated partition, the perforations being of such shape that the eyelets pass from the first chamber to the second, with the turned or flanged end downward. The height of this second chamber is such that the eyelets cannot turn over while passing through it, and it tapers so that the eyelets are forced finally to move in single file down a curved way, C, which reverses their position as they pass over the curve at the end next the magazine. The way, C, down which the eyelets slide, consists of two rails sufficiently separated to allow the body of the eyelets to pass between them, while the rim or flange slides along their upper surfaces. At I, two springs act as fingers to hold the eyelets from dropping till they are wanted.

A spring latch, B, serves to secure the cover to the magazine, A, so that the eyelets cannot be accidentally thrown out.

Having thus traced the course of the eyelets to the point of insertion, we will next describe the movement of the machine.

A rod, M, connects the principal actuating lever, F, of the machine with a foot lever or treadle. The lever, F, is weighted, as shown, so that when it is not moved by the foot lever through the rod, M, it falls into the position shown in the engraving.

By the action of the foot lever the back end of the lever, F, is raised, and being pivoted at S a right-angled lateral projection, H, forces down the sliding punch stock, which carries a punch corresponding to the female die, J, and an eyelet-riveting punch corresponding to the die, K.

A link, E, connects the principal lever, F, with the frame which carries the magazine, A, and the sliding way, C. This frame is pivoted at D, so that every movement of F raises it, and by means of a slot and a pawl arrangement, not distinctly shown in the engraving, allows it to fall with a sudden jar, by which the eyelets in the magazine are shaken up and a sufficient number passed through into the second chamber and down the way, C, to keep the punch supplied.

The die corresponding to the die, K, is a hollow cylinder, and has a spindle in its interior, which, when it meets the upper point of K is thrust up into the hollow, and as the die rises is thrust out again by a spring. The eyelet having arrived at the spring fingers, I, the sliding punch stock descends and thrusts the spindle just described through the eyelet. As the punch stock descends vertically, and the spring fingers are drawn back radially, they are forced to release the eyelet, which then slides down the spindle on to the die, K, where it is riveted by the force of the blow. At the same time a new hole is punched in the leather by the punch corresponding to the female die, J; a guide bar, L, serving to keep the distance from the edge uniform.

The punch stock is raised by a hook, N, which engages with the lateral projection, H, on the lever, F.

The facility and accuracy, with which this machine does its work, are surprising, and its merits will undoubtedly attract the attention of all interested in the shoe manufacture, where it will find its most useful application.

It was patented, June 30, 1868, and a patent for recent improvements is also now pending through the Scientific American Patent Agency.

For further information, address Albert Komp, 215 Center street, New York city.

Improved Tool Holder and Machine for Turning and Scraping Grindstones.

Every mechanic is aware that the accurate grinding of a tool can be accomplished only on a stone properly faced and free from glazed streaks, and that with many kinds of tools it is important that they should be held uniformly at a given

means of a wedge-shaped step-block, B. This plate carries a tool holder, C, by which the adjustment of the scraper, D, is effected, and by which the latter is firmly held when dressing the stone.

Parallel motion is given to the tool holder by means of a slot in the plate, A, in which a guide slides.

The tool holder is also used for holding any other tool which it is desired to grind perfectly true, acting as a clamp firmly sustaining the tool to be ground in the required position. A fender plate, E, prevents the scattering of dust while facing the stone.

The form shown in the engraving is a cheap style for general use; it will, however, be understood that the principle may be carried to any extent, and to any degree of refinement, for any tool of whatever size or length required for various kinds of work.

This device has been made the subject of four patents, bearing date, respectively, July 14, 1868, June 29, 1869, December 7, 1869, and February 22, 1870, all taken through the Scientific American Patent Agency by Philip Leonard, Sharon, Pa., who may be addressed for rights, etc.

The Wild Beast Trade.

An English magazine says, "The trade in wild beasts is a system as regular as the trade in tea, coffee, or cotton, or any other merchandise. Some creatures, of which parrots are the most numerous, are brought over by sailors, who intend them, perhaps, as presents for their sweethearts, but they sell them for grog or tobacco as soon as they land. A dealer has agents in every country; and these agents communicate with the natives of the various countries. The system is now carried to such perfection, that if any gentleman or lady would like an elephant for private riding, a tiger as an ornament to the garden, a crocodile or hippopotamus for the lake, or an ostrich or emeu for the lawn, the wish can be gratified by merely addressing a letter to the London dealer. He will calculate distance, the time occupied in catching and transporting the desired animal, give a close estimate of the cost, and deliver it at the door on the appointed day."

RUBBER TIP FOR FURNITURE LEGS.

In some forms of rubber tips for furniture legs, now in use, the method of attachment is such that when the rubber wears away from long usage, the attachment by which it is held fast to the leg, becomes a nuisance, and cutting carpets. There is also danger of their coming off, especially when submitted to the test of the Yankee practice of tipping back in chairs. These things have been serious drawbacks to the use of such tips for libraries, sitting rooms for hotels, etc., when otherwise they would be found very useful, in preventing the wear of polished floors, and reducing the noise consequent upon moving chairs from place to place, sliding them about, etc.

The object of the present invention is to remove both the annoyances specified.

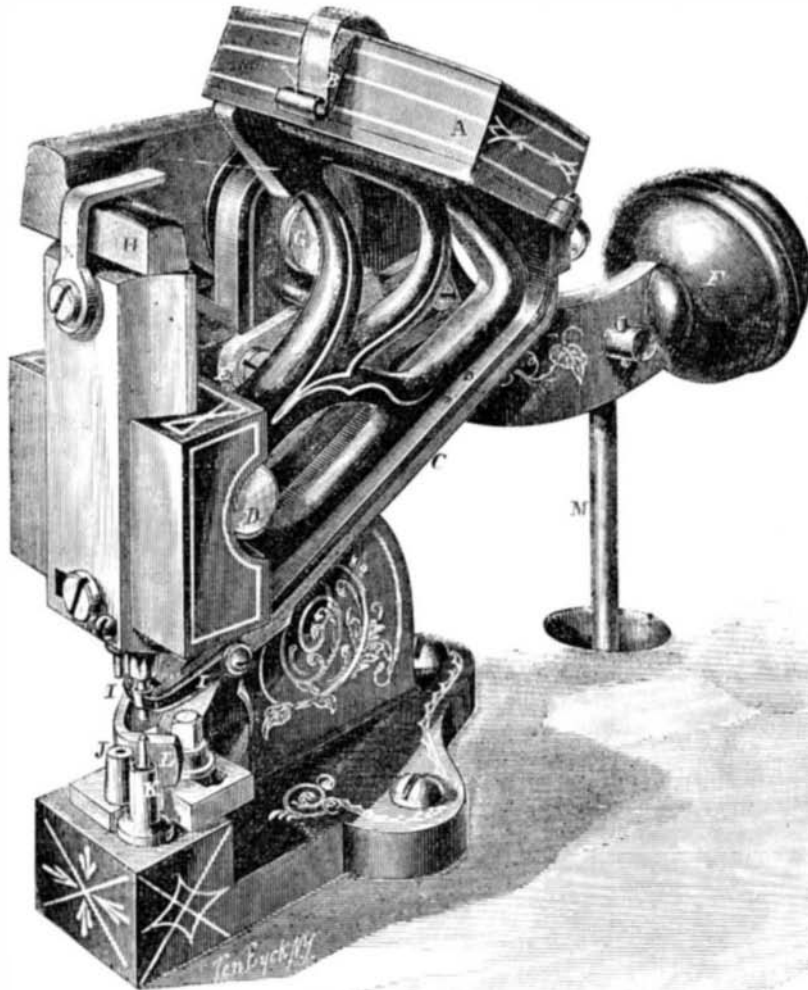
The screw by which the rubber tip is held to the leg is formed as shown at A, Fig. 1, with a broad head, to abut against the leg, as shown in Fig. 2; and it also has a button, B, formed upon the head, upon which the rubber tip is cast, as shown.

The portion of the head which abuts against the end of the leg, is made octagonal in form, with a circular flange, which gives it a finished appearance, the angular part enabling it to be driven into the wood by a wrench, or other suitable implement.

The whole forms a neat, cheap, and durable attachment,

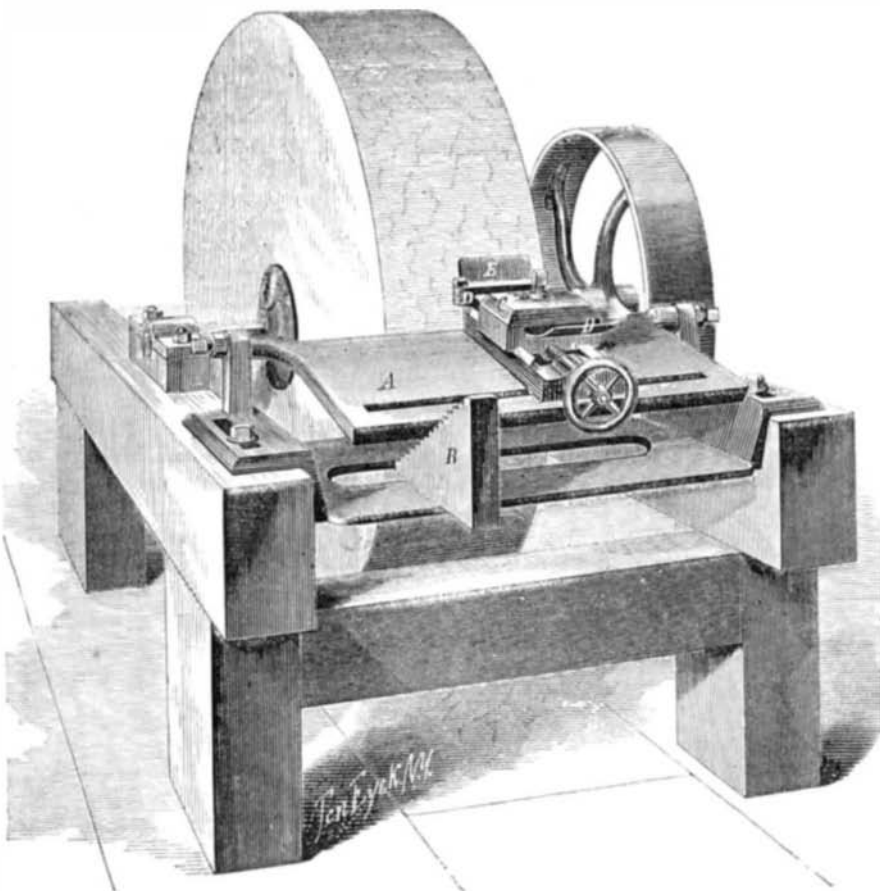
and we regard it as a decided improvement upon other methods hitherto employed.

Patented, through the Scientific American Patent Agency Dec. 22, 1868, by O. B. Collins, whom address for further information, Box 249, Charleston, S. C.

**KOMP'S COMBINED PUNCHING AND EYELET-INSERTING MACHINE.**

angle. This is in many cases a difficult thing to do, especially in grinding long knives for wood planers, tobacco cutting machines, and the like.

The invention we herewith illustrate, is designed to provide for both the convenient and accurate facing of the stone, and the uniform holding of tools in grinding, and is, we believe, not only a cheap but a valuable adjunct to a grindstone in most shops and manufactories.

**LEONARD'S TOOL HOLDER AND GRINDSTONE DRESSING MACHINE.**

The parts are so clearly delineated by the excellent engraving, that any mechanic will comprehend at once the operation of the device.

A pivoted plate, A, is adjusted to any required angle by

