(No Model.)

A. E. RANDLE.

MORTISING DEVICE.

No. 483,869. Patented Oct. 4, 1892.

Fig. 1.

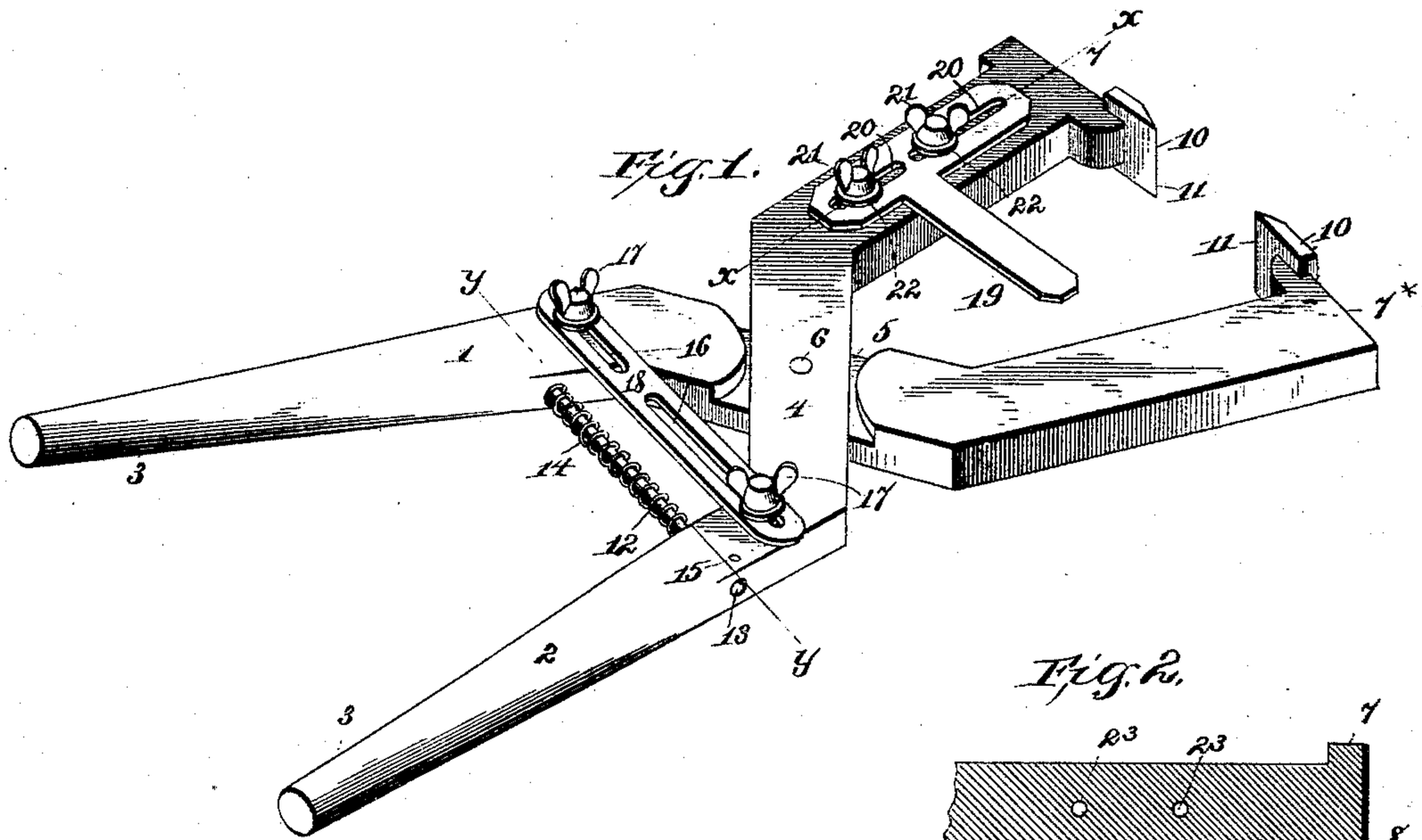


Fig. 2.

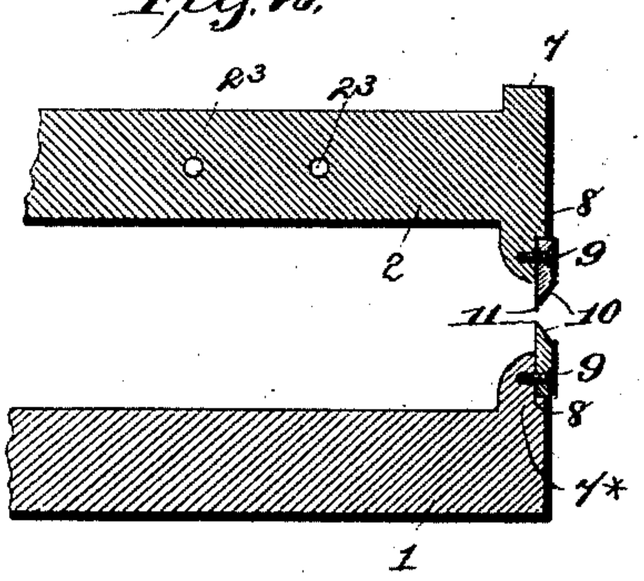


Fig. 3

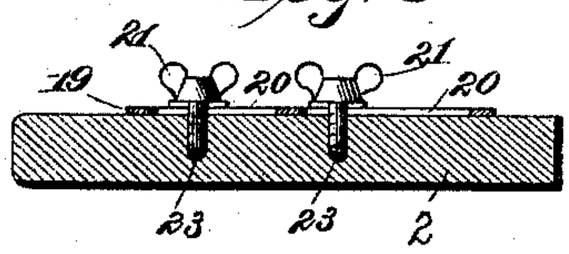
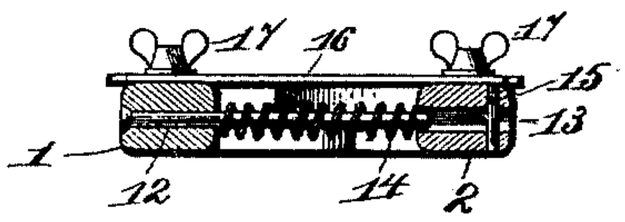


Fig. 4



Witnesses.

E. C. Hardeman,

W. S. Duvall.

Inventor

By his Attorneys, Alex. E. Randle

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

ALEXANDER ELI RANDLE, OF GRAYVILLE, ILLINOIS.

MORTISING DEVICE.

SPECIFICATION forming part of Letters Patent No. 483,869, dated October 4, 1892.

Application filed August 19, 1891. Serial No. 403,084. (No model.)

To all whom it may concern:

Be it known that I, ALEXANDER ELI RANDLE, a citizen of the United States, residing at Grayville, in the county of White and State of Illinois, have invented a new and useful Mortising Device, of which the following is a specification.

This invention relates to a device for forming mortises in studdings and joists; and the objects in view are to provide a device adapted for this purpose whereby the operation may be carried on with facility and dispatch and mortises at uniform distances apart and of uniform sizes may be formed.

Other objects and advantages of the invention will appear in the following description, and the novel features thereof will be particularly pointed out in the claim.

Referring to the drawings, Figure 1 is a perspective of a mortise-cutter constructed in accordance with my invention. Fig. 2 is a longitudinal section through the head of the same, the members being broken away. Fig. 3 is a longitudinal section through that member carrying the gage, the section being taken on the line $x\ x$ of Fig. 1. Fig. 4 is a transverse section on the line $y\ y$ of Fig. 1.

Like numerals of reference indicate like parts in all the figures of the drawings.

In practicing my invention I employ two companion members 1 and 2, the same being similarly formed at their inner ends and provided at their rear ends with handles 3. Near their centers the members are inclined, as at 4, and upon their inner faces are recessed, as at 5, to receive each other and are pivotally connected by means of a bolt 6. Beyond their inclined portions 4 the members extend forwardly and parallel to each other, and the member 2 is provided at its outer extremity with a transverse head, which head is greater in length than the width of the member, and consequently extends beyond the inner and outer sides or faces of the same, the inner extension forming the jaw 7. Member 1 has its forward inner corner extended inwardly to form a companion jaw 7*, and each of the jaws 7 and 7* is provided with an L-shaped recess 8, in which is seated and removably secured by a screw 9 a cutter or blade 10. These cutters are simply oblong plates of cast-steel, the inner edges of which are beveled to form the cutting-edges 11. A set of variously-sized cutters accompany each device, and by means of the screw 9 any size of cutter adapted to cut the desired size of mortise may be applied to the heads.

A transverse rod 12 is passed through the member 1 in rear of its pivot-bolt 6 and at its opposite end passes loosely through an opening 13, formed in the member 2, a coiled spring 14 being mounted upon the rod between the two members and serving to normally spread them. A plug or pin 15 is passed through the member 2 and intersects the opening 13 of that member, so that the plug or pin lies in the path of the transverse rod, and against the pin the rod abuts when the members are brought together, so that the pin acts as a stop and limits the inward movement of the members, and hence prevents the cutting-edges of the cutters from coming into actual contact and thus dulling each other.

A pair of set-screws 17 is inserted in the members 1 and 2 between the bolt 6 and the rod 14, and the same pass through the slots 16, formed in a transverse plate 18. By adjusting one of the set-screws in the slot the lateral separation of the members may be determined, so that it will be seen that said members are limited in their movements both inwardly and outwardly.

19 designates a gage-plate, which is of T shape and has its upper or cross portion provided with longitudinal slots 20, while its shank or stem portion is transversely disposed across the space between the two members, slightly in rear of their heads 7. Through the slots 20 are passed set-screws 21, the stems also passing through washers 22, resting on the gage-plate, and through or into threaded perforations 23, formed in the face of one of the members, so that by loosening the set-screws the gage-plate may be slid along the said member, so as to locate the shank of the gage-plate at various distances from the cutters and there adjust it.

In operation the proper size of cutters are first secured to the heads and the gage-plate adjusted so as to permit the cutters to enter the joist or studding the proper distance from the edge of the latter. The members are now

introduced over the edge of the studding or joist until the gage-plate rests against the edge of the same, whereby it may be made known to the operator that the cutters are opposite a proper point at the sides of the joist or studding. The handles are now brought together, which action brings the edges of the cutters in contact with the sides of the joist, and by a few blows with a hammer or mallet upon the outer end of that head having its outer end extended for the purpose the cutters are driven their full depth into the studding or joist, the penetration continuing until arrested by the end of the transverse rod 14 coming in contact with the stop plug or pin 15. This arrest of the movement upon the part of the cutters takes place just previous to meeting of the cutters, so that, as before stated, the edges of the latter are not dulled or injured by contact. In this manner it will be seen that the mortises are uniformly formed at proper distances from the edge of the studding and with great facility, and by the use of the device I avoid the necessity of employing great care and nicety, as is necessary in cases where the mortises are formed by chisel and mallet, so that the operation not only results more successfully, but is much less tedious and more rapidly carried on.

Having described my invention, what I claim is—

The herein-described mortising device, the same consisting of the opposite members inclined and crossing each other at their centers, a pivot connecting the two, said members terminating at their outer corners in inwardly-disposed jaws 7, provided with the recesses 8, the cutters mounted in the recesses, and the screws passing through the same into the heads, the T-shaped gage-plate having slots and set-screws passed through the same into one of the members, the limiting-plate 18, having slots 16, crossing the members in rear of their pivot, set-screws passed through the slots into the members, the rod 12, extending from one member through the opposite member, the coiled spring thereon and interposed between the two members, and the stop-pin 15, passed through one member into the path of the rod, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

ALEXANDER ELI RANDLE.

Witnesses:
J. A. SHELTON,
WM. W. GRAY, Jr.