G. S. HUDSON.

GAGE-ATTACHMENT TO WOOD-BORING MACHINES.

No. 170,267. Patented Nov. 23, 1875.

Fig: 1.

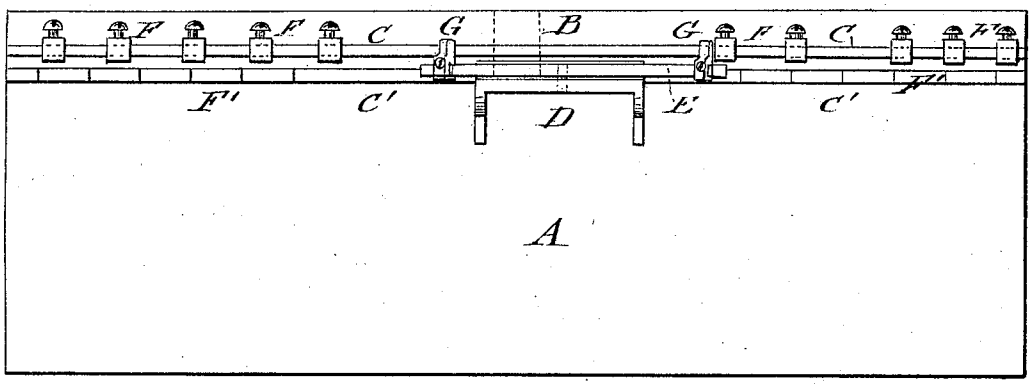


Fig: 2.

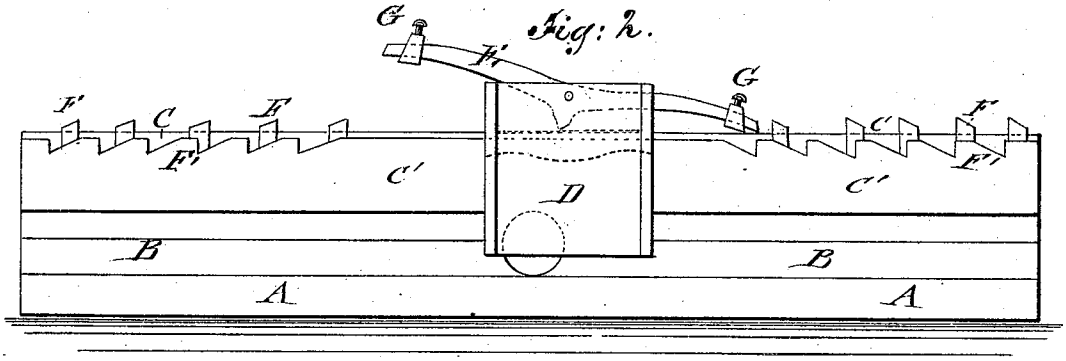


Fig: 3.

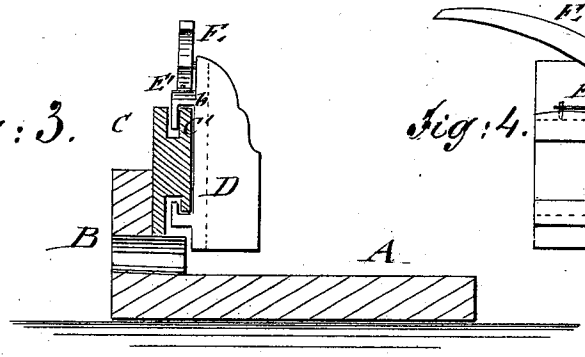


Fig: 4.

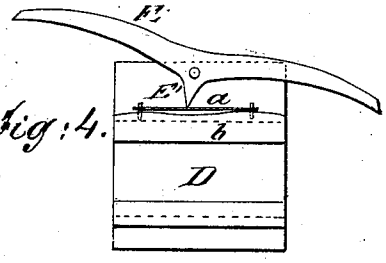
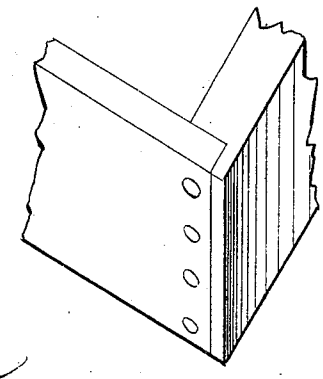


Fig: 5



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UNITED STATES PATENT OFFICE.

GEORGE S. HUDSON, OF ELLISBURG, NEW YORK.

IMPROVEMENT IN GAGE ATTACHMENTS TO WOOD-BORING MACHINES.

Specification forming part of Letters Patent No. **170,267**, dated November 23, 1875; application filed September 4, 1875.

To all whom it may concern:

Be it known that I, GEORGE S. HUDSON, of Ellisburg, in the county of Jefferson and State of New York, have invented an Improvement in Gage Attachment to Wood-Boring Machines, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a top view, Fig. 2 a front view, and Fig. 3 a vertical transverse section, of my improved gage attachment for wood-boring machines; Fig. 4, a detail side view of the sliding head-block with double spring-pawl, and Fig. 5 a specimen of the work executed by means of the gage.

Similar letters of reference indicate corresponding parts.

The invention will first be described in connection with drawing, and then pointed out in the claims.

In the drawing, A represents the table or support of my improved gage, which is adjusted upon the bed of an ordinary horizontal boring-machine into the exact position to the bit required by the work. A vertical back piece, B, of the table supports the grooved metallic ways C C′, which carry the traversing head-block D. Block D slides in either direction from the center of back piece B, through whose central aperture the bit passes, and is held in position by a double spring-pawl, E, which engages either the adjustable lugs F of way C, or the rack-teeth F′ of way C′, according as the holes are to be made at irregular or variable distance from each other. The lugs F are fastened by set-screws to the way C, and adjusted readily into any position required for the work, the wood being exposed to the bit from the side or edge at both ends with one handling of the stuff. The double pawl E is centrally fulcrumed to head-block D, and provided with a central projecting arm, E′, that bears on a spring, *a*, of the curved shoulder *b* of the head-block, so as to be acted upon when used in either direction on the ways. The lugs F, as well as the regular rack-teeth F′, are arranged symmetrically to the center of the back piece, and of the bit-entering aperture, to allow the feeding of the stuff at either end, or in either direction, by merely carrying the double pawl over to engage the lugs or teeth of the opposite side.

When holes at irregular distances are to be bored, the lugs F are adjusted accordingly, and the ends of pawl E provided with side projecting sleeves G, that are fastened by set-screws, so as to pass above the teeth of ways C′, and engage the lugs of way C.

When holes at fixed and regular distances have to be bored, as in drawers and similar articles, the sleeves G are detached, and the pawl is used in connection with the rack-teeth, enabling thereby the boring of a series of holes, and, by replacing the bit with a hollow auger, the cutting of a series of accurately-fitting tenons, which facilitates especially drawer and similar work. The stuff is fed in perfectly accurate and reliable manner to the bit or auger, and thereby a superior fit at a saving of time and labor obtained.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A gage for wood-boring machine, constructed of table A B, grooved ways C C′, with lugs F and ratchet F′, sliding head-block D, with double spring-pawl E, and detachable side projecting sleeves G, to guide the articles in accurate manner to the boring-bit or auger, substantially in the manner and for the purpose set forth.

2. The grooved ways C C′, of which one has adjustable lugs F, the other rack-teeth F′, in combination with the double spring-pawl E, being adjustable to either way and direction, substantially in the manner and for the purpose set forth.

GEORGE S. HUDSON.

Witnesses:
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