

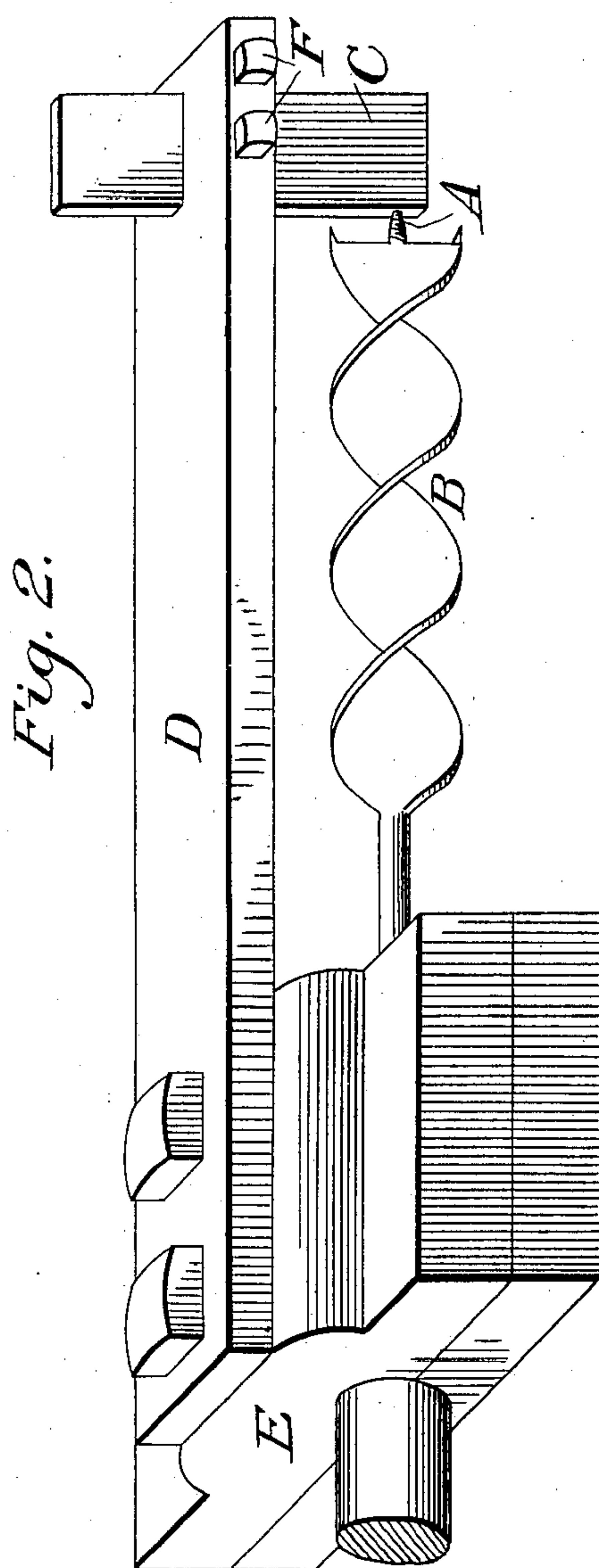
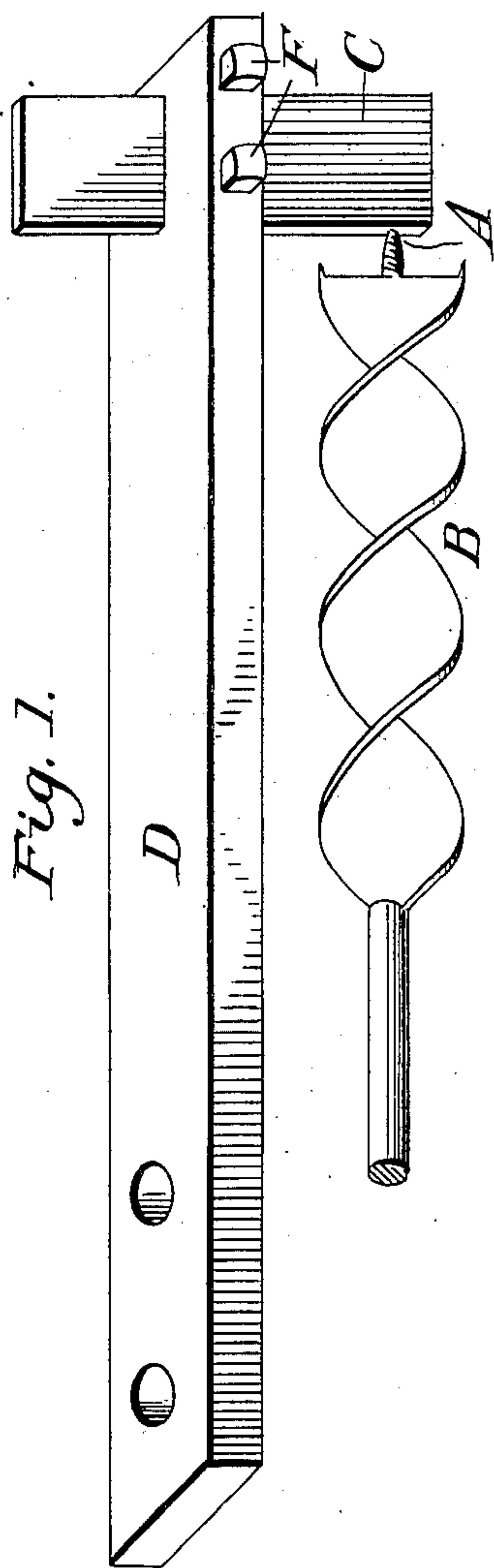
No. 735,896.

PATENTED AUG. 11, 1903.

A. M. NEWELL.
BORING MACHINE.

APPLICATION FILED JULY 19, 1901.

NO MODEL.



Witnesses:

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UNITED STATES PATENT OFFICE

ATWOOD M. NEWELL, OF IRWIN, PENNSYLVANIA.

BORING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 735,896, dated August 11, 1903.

Application filed July 19, 1901. Serial No. 68,972. (No model.)

To all whom it may concern:

Be it known that I, ATWOOD M. NEWELL, a citizen of the United States, residing at Irwin, in the county of Westmoreland and State of Pennsylvania, have invented a new and useful Boring-Machine, of which the following is a specification.

My invention relates to improvements in boring-machines which are used for the purpose of boring lengthwise through timbers that are to be used for conductors of either air or liquids or through wooden parts of structures in which metal rods or pipes are to be inserted.

The object of my improvement is to direct the auger while it is advancing through the timber so that it cannot be forced to deviate from its proper course either by the grains of the wood or by any contact with knots. I attain this object by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view showing what I claim as my invention only. Fig. 2 is a perspective view of my invention, together with enough only of the old machine to show their connections.

Similar letters refer to similar parts throughout each view.

The gudgeon A, which forms a part of the auger B, turns in the guide-plate C, that is supported by the connecting-bar D, the rear end of which is attached to a stationary part of the machine E, while near the opposite end the guide-plate C is attached to and made adjustable on it by means of the set-screws F F. In the timber and on a line with the hole to be bored a groove is cut having a proper width and depth to allow the guide-plate C to travel in it while the auger B is advancing. If possible, the timber should be placed on the carriage of the machine with its grooved side up, and in case the hole is to be bored on a line parallel with that side of

the timber the end of the connecting-bar D may slide upon the timber and be held down either by its own or by an additional weight; but should the form of the timber be such as to preclude this arrangement the connecting-bar D must by the best means available be made fast in the proper position to correspond with the groove in the timber.

The principles of my invention may be carried out in various forms; but those herein set forth are those which in my opinion are the most convenient and practical.

I am aware that prior to my invention grooves have been made to assist in guiding the auger. I do not, therefore, claim that as any part of my invention; but

What I do claim, and what I desire to secure by Letters Patent, is—

1. In a boring-machine, the combination of an auger, a relatively stationary frame supporting the stem of the auger, the said stem being revoluble in the said support, a connecting-bar removably secured to the said support, a guide-plate, devices for adjustably attaching the said guide-plate to the connecting-bar, the said guide-plate being provided with a hole near one end, and the said auger having a gudgeon A constructed and arranged to engage and turn in the said hole in the guide-plate, substantially as described.

2. In a boring-machine, the combination of a connecting-bar, a guide-plate, devices for securing the connecting-bar and guide-plate together, the said guide-plate being provided with a hole near one end, and an auger having a gudgeon A constructed and arranged to engage and turn in the said hole in the guide-plate, substantially as described.

ATWOOD M. NEWELL.

Witnesses.

CHARLES LUCIEN PALMER,
JAMES BIERER GALLAGHER.