

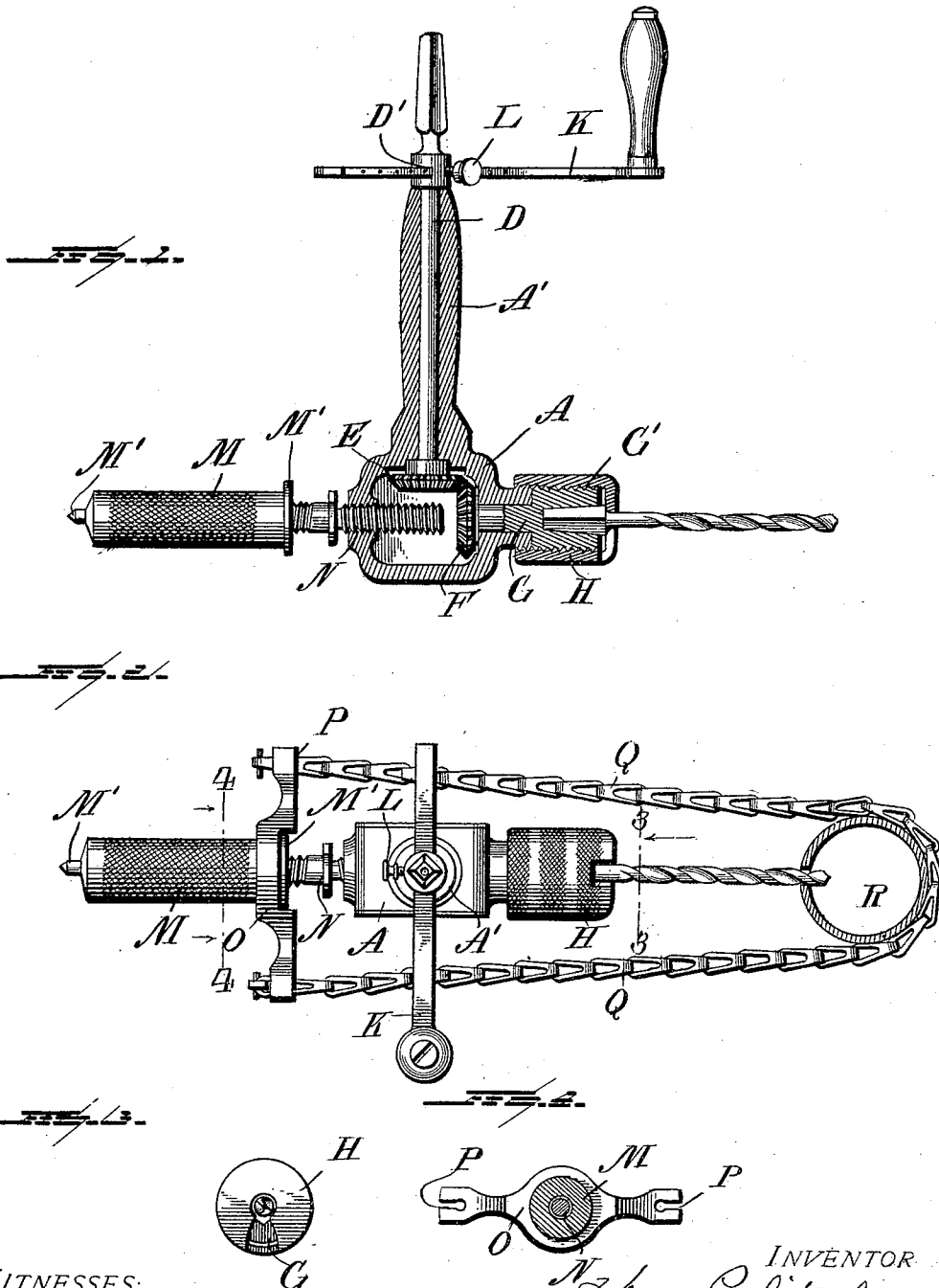
No. 683,794.

Patented Oct. 1, 1901.

H. POLITSCH.
ANGLE BIT STOCK.

(Application filed July 17, 1901.)

(No Model.)



WITNESSES:

Wm. F. Doyle.
a L. Hough

INVENTOR

Henry Politseh,

BY *Franklin H. Hough*
Attorney

UNITED STATES PATENT OFFICE.

HENRY POLITSCH, OF GLOVERSVILLE, NEW YORK.

ANGLE BIT-STOCK.

SPECIFICATION forming part of Letters Patent No. 683,794, dated October 1, 1901.

Application filed July 17, 1901. Serial No. 68,660. (No model.)

To all whom it may concern:

Be it known that I, HENRY POLITSCH, a citizen of the United States, residing at Gloversville, in the county of Fulton and State of New York, have invented certain new and useful Improvements in Angle Bit-Stocks; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in bit-stocks and feeding devices, and especially to an angular stock designed for use in boring or drilling holes in places inaccessible to the ordinary bit-stock; and it consists in the provision of various details of construction and combination of parts, as will be hereinafter more fully described and then specifically defined in the appended claim.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this application, and in which drawings similar letters of reference indicate like parts throughout the several views, in which—

Figure 1 is a sectional view of my improved bit-stock. Fig. 2 is a top plan view of the stock and feeding attachment. Fig. 3 is an end view of the bit-socket, and Fig. 4 is a sectional view on line 4 4 of Fig. 2.

Reference now being had to the details of the drawings by letter, A designates a boxing of any suitable shape, which is hollow and provided with a removable side whereby access may be had to the interior of said boxing. A projecting hollow shank portion A' of said boxing has journaled therein the shaft D, which has a bevel-gear E keyed to its inner end, which gear-wheel is located in the boxing A and is in mesh with a similar gear-wheel F, that is keyed or otherwise fastened to the inner end of the socket member G, said gear F also being inclosed in the boxing. The circumference of the socket member, the shank portion of which is journaled in a hollow projecting arm from the wall of the boxing, is threaded, as at G', and the chuck H,

interiorly threaded, screws over the threads of the socket member. The outer closed end of the chuck is slotted to receive the end of the bit or drill, the portion of said slot nearest the circumference of the chuck being somewhat wider than its inner portion, so as to receive the butt of the bit or drill. When the chuck is screwed home, the inner wall of its end portion will bear against the shoulder formed at the end of said butt and holds the bit or drill securely in the socket member. The outer end of the shaft D is apertured, as at D', to receive the crank K, which latter may be adjustably held in said aperture by means of a set-screw L. The portion of said shaft at its extreme end is squared and tapered slightly to receive the chuck of another bit-stock if it should be desired to use one for any purpose.

Fitted in a threaded aperture in the side of the boxing, opposite the side carrying said chuck and socket member, is a threaded shaft N, with wrench-hold N' thereon, whereby the inner end of said shaft, which is provided with the usual right threads, may be screwed into the boxing, while its outer end is provided with left threads, on which the hollow interiorly left-threaded cylindrical feed-cylinder M is mounted. The outer circumference of said feed-cylinder is limbed, so as to allow the operator to have a good grip thereon when turning same to feed the drill. The outer end of the cylinder M is pointed, as at M', so as to engage and hold the end of the feed-cylinder in any stationary object. In the event of there being no suitable means for the outer end of the cylinder M to bear against I provide a yoke O, which is centrally apertured and fits over the cylinder M and is designed to bear against the shoulder M' of the cylinder, the ends of said yoke being slotted, as at P, to receive the ends of the chain Q, one end of which is first caught in a slot at one end of the yoke, passed about the object R to be drilled, and its other end caught in the slot at the opposite end of the yoke. By this means the feeding-cylinder has a bearing against the yoke, which is adjustably anchored, as described, to the object being bored or drilled.

From the foregoing it will be observed that a hole may be bored in locations inacces-

sible by the usual bit-stock, the feed may be effected either, with or without the brace-chain, and the device operated either with the adjustable crank or by an ordinary bit-stock.

5 Having thus described my invention, what I claim to be new, and desire to secure by Letters Patent, is—

10 An angle bit-stock comprising a casing, a shaft journaled in a hollow projecting portion thereof, a bit-stock having a shank portion, geared connections between same and said shaft, a feed-screw, a shell mounted on said screw, said shell having a flange at its inner end, combined with a cross-bar O hav-
15 ing a central aperture adapted to fit over said

shell, and countersunk on one side to receive the flange of the shell, the ends of said bar being slotted, and a chain having links which are adapted to engage transversely across said slots and against the outer face of the bar, whereby the boring apparatus may be held to an article being drilled, as set forth.

In testimony whereof I hereunto affix my signature in presence of two witnesses.

HENRY POLITSCH.

Witnesses:

JOHN W. BURR,
EZRA A. SUTLIFF.