

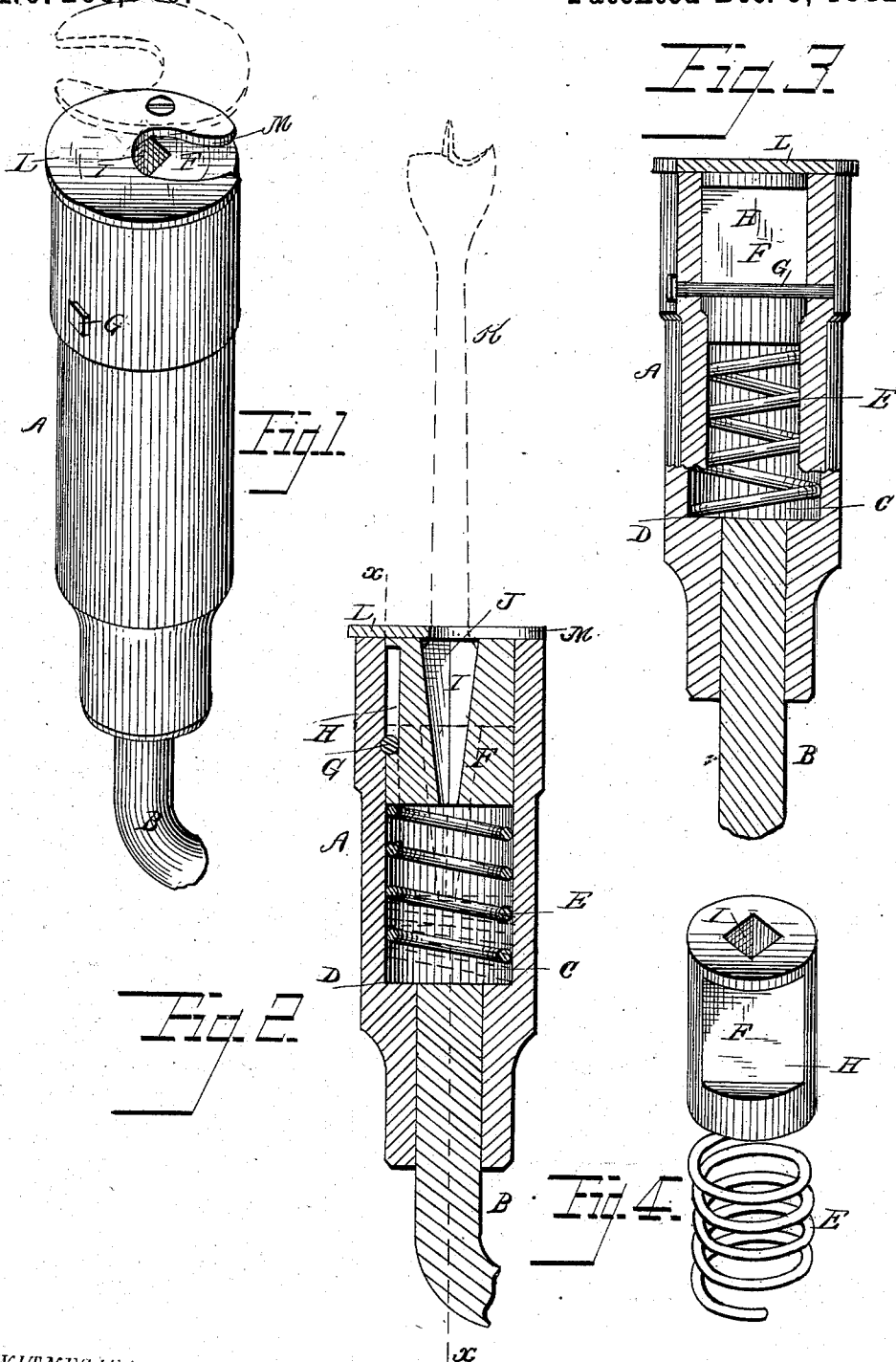
(No Model.)

F. J. COLVIN.

BRACE HEAD FOR BITS AND BRACES.

No. 268,460.

Patented Dec. 5, 1882.



WITNESSES
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UNITED STATES PATENT OFFICE

FREDERICK J. COLVIN, OF HAMDEN, CONNECTICUT.

BRACE-HEAD FOR BITS AND BRACES.

SPECIFICATION forming part of Letters Patent No. 268,460, dated December 5, 1882.

Application filed September 15, 1882. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK J. COLVIN, a citizen of the United States, residing at Hamden, in the county of New Haven and State of Connecticut, have invented a new and useful Improvement in Brace-Heads for Bits and Braces, of which the following is a specification, reference being had to the accompanying drawings.

10 This invention relates to brace-heads for the reception of a boring-bit, and has for its object to provide a simple, durable, inexpensive, and efficient head that will "give" to the bit, but yet retain it securely in position.

15 In the drawings, Figure 1 is a perspective view of the head. Fig. 2 is a central longitudinal sectional view. Fig. 3 is a like view on the line *x x*, Fig. 2; and Fig. 4 is a perspective detail view of the interior parts separated.

20 Referring to the drawings, A designates the head, which is connected to the shank B of the brace, and is provided with a longitudinal recess, C, having a shoulder, D, at its top. In this recess C is placed a coiled spring, E, which is adapted to be compressed against shoulder D by the bit-socket piece F. The latter is placed in recess C against the spring E, and is held in position by a transverse pin, G, passing through the head A, and accommodated in a longitudinal recess, H, in the side of socket F, which socket fits neatly in recess C. Socket F has a central perforation, I, to receive the

square end J of the bit K, and the latter is retained in position by means of a cap plate or piece, L, pivoted to the bottom edge of the brace-head A and provided with a recess, M, opening from the edge. The end of this recess, when the plate is adjusted under in locking position, comes under the enlarged end J, and is held thus by the outward pressure of the socket caused by spring E.

The operation and advantages of my invention will be readily understood. After the bit is adjusted in position and the brace and bit are brought into use, the socket F will "give" or slide up on the pressure of the bit, this movement being limited by the pin G in recess H. When the pressure of the bit ceases the socket, by reason of spring E, returns to its normal position.

I claim as new—

The combination, with the brace-head having the sliding-bit socket pressing outwardly, of a bit-securing plate pivoted at the under edge of the head and having a recess extending from the head to receive and retain the bit, as set forth.

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

FREDERICK J. COLVIN.

Witnesses:

JAMES WARNER,

ANDREW J. DOOLITTLE.