

M. Andrews,

Bit Stock,

N^o 5087.

Patented Apr. 24, 1847.

Fig: 2.

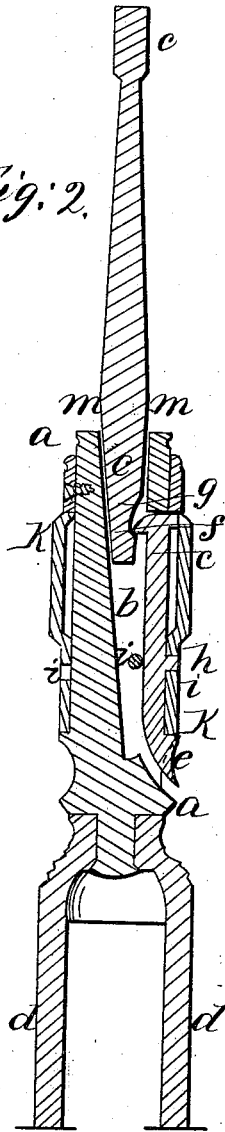
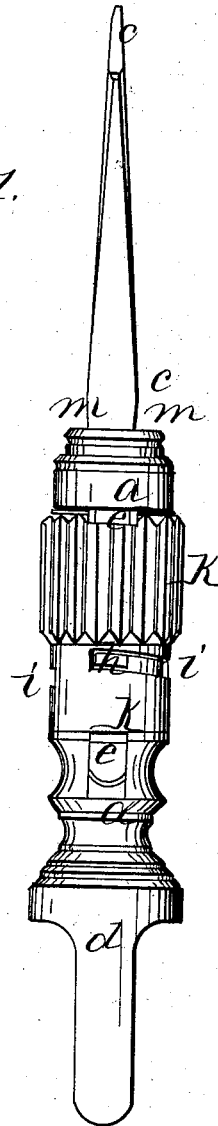


Fig: 1.



UNITED STATES PATENT OFFICE.

MANASSAH ANDREWS, OF BRIDGEWATER, MASSACHUSETTS.

BIT-STOCK.

Specification of Letters Patent No. 5,087, dated April 24, 1847.

To all whom it may concern:

Be it known that I, MANASSAH ANDREWS, of Bridgewater, in the county of Plymouth and State of Massachusetts, have invented a new and useful Improvement in the Mode of Confining a Bit to Its Stock, and that the following description, taken in connection with the accompanying drawings, hereinafter referred to, is a full and exact specification of the same, wherein I have set forth the nature and principles of my said improvement, by which my invention may be distinguished from others designed for a similar purpose, together with such parts as I claim and desire to have secured to me by Letters Patent.

Those who are obliged to make any considerable use of bit-stocks, invariably complain of the imperfection in the existing modes of confining the bit in the socket of the stock, which must be firmly done in order to perform true work with the tool. The "English bit-stock" (so called), which is the one mostly in common use in this country, is contrived with a single spring catch in the socket of the stock, which engages with a corresponding notch near the butt of the "bit." This spring catch soon gets loose by wear, and allows the butt of the bit to play more or less and thus reduces the utility of the instrument.

In my improvement the use of springs is entirely superseded; and the confining catch which engages with the notch on the bit is cast near the end of a thumb lever, which is arranged so as to play loosely in a suitable slot in the socket of the stock. Near that end of this lever to which the thumb is applied is cast an external stud which works or fits into a spiral or inclined slot formed in a turning collar, which collar is fitted to and turns on the socket aforementioned.

The figures of the accompanying plate of drawings represent my improvement.

Figure 1 is a side elevation of the metallic portion of a bit-stock, and Fig. 2 is a vertical section of the same in which the operation of the several parts is clearly denoted.

a a, Figs. 1 and 2, is the socket of the stock formed in the interior with a proper space *b* for the reception of the butt of the bit *c c*. The tool is represented without a handle to which it might be confined in the usual way through the medium of the prongs *d d*.

e e is the thumb lever above referred to, having an internal catch, *f*, near its upper end, which engages with the notch *g* near the butt of the bit as shown in Fig. 2. On the exterior of this thumb lever, and near the bottom as above suggested is a stud *h* which fits in a spiral or diagonal groove *i i* cut in the turning collar *k k* as shown in Figs. 1 and 2. The thumb lever *e e* is kept in position in the interior of the socket by means of a cross pin *l*, which also serves as a fulcrum for its motions. The collar *k k* is fitted on the socket as shown in Fig. 2, and the bit is made in the usual way with a wedging shoulder at *m m* which bears against the square mouth of the socket, which mouth is of lesser dimension than said shoulder. From this arrangement, it will be seen that when the catch of the lever, has engaged with the notch of the bit, if the collar *k k* be turned, the top of the inclined slot *i i* will press on the stud *h* and thereby pull the bit downward until its wedging shoulder comes to a solid bearing in the mouth of the socket where it is firmly held. When the stud is in its primal position in the spiral slot, the collar is so arranged or cut out that the thumb lever may play a little as is necessary in order to disengage the catch *f* from the notch *g*, and change the bit, but when the collar is turned a little it engages said catch and notch more perfectly and confines them together.

Having thus described my improvement, what I claim as my invention and desire to have secured to me by Letters Patent is—

The mode herein-above described of confining a bit to its stock, viz: by means of a thumb-lever *e e* having a catch *f* and stud *h* as described in combination with a turning collar *k k* having a spiral slot *i i* as set forth, the whole arrangement and operation being substantially as herein before specified—

In testimony that the foregoing is a true description of my said improvement I have hereto set my signature this second day of November, in the year eighteen hundred and forty six.

MANASSAH ANDREWS.

Witnesses:

WILLIAMS LATHAM,
PASCHALL BASSETT.