I. Holliday,

Bit Stock.

No 103462.

Patented May 24. 1870.

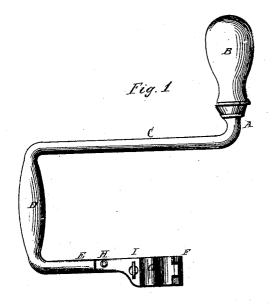
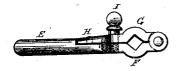


Fig. 2



Witnesses:

& J. Marie

Inventor:

(Nolliday

PER MMM

Attorneys.

## United States Patent Office.

ISAAC HOLLIDAY, OF SOUTH BROOKLYN, NEW YORK, ASSIGNOR TO HIM-SELF AND GEVERT PAPO, OF SAME PLACE.

Letters Patent No. 103,462, dated May 24, 1870.

## IMPROVEMENT IN BIT-STOCKS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, ISAAC HOLLIDAY, of South Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Clamp for securing Augers to Cranks; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

Figure 1 is a side view of a crank, showing my im-

proved clamp.

Figure 2 is a detail view of the lower arm or clamp. Similar letters of reference indicate corresponding

My invention relates to clamps for securing angers

to cranks; and

The improvement consists in hinging the clamp to the end of the crank-arm, and securing the same at its free end by means of a set-screw and guide-pin.

A is the upper end of the crank, which is swiveled

to a hand-piece, B.

C is the upper horizontal arm.

D is the vertical arm, upon which is formed a handpiece.

E is the lower horizontal arm, which should be parallel with the arm C, and about half the length of the

said arm C.

F G is the clamp, one of the arms or parts of which, as F, is formed solidly upon or is rigidly and securely attached to the end of the arm E of the crank. The arms F G are hinged to each other at their outer ends, and their adjacent sides are so formed as to fit closely to each other.

H is a guide-pin securely attached to the stationary arm I of the clamp, and which enters a hole in the movable arm G to guide said arm into its proper po-

In the adjacent sides of the arms F G of the clamp are formed V-shaped notches, which, when the clamp is closed, are directly opposite to each other, and together form a square socket to receive the square shank of the auger.

I is a set-screw, which passes through a hole in the movable arm G, and screws into a screw-hole in the stationary arm F, so as to securely fasten the arm G

to the arm F, securely holding the auger.

The arms F G should be made with a swell upon their outer sides opposite the notches in their inner sides to give the necessary thickness and strength.

The jointed ends of the arms F G should be

smoothly finished, and the auger-shank must be so arranged that its upper end may be flush with the inner surface of the said clamp, to avoid any liability of the operator to injure his hands or tear his clothes upon the projecting end of the said auger-shank.

I am aware that a clamp so hinged to the crank-arm that the free end projects outwardly and is secured by a set-screw between the hinge and socket for the auger has been invented, but this construction, as above intimated, is objectionable and forms no part of my invention.

Having thus described my invention,

I claim as new and desire to secure by Letters Patent-

The arm G hinged to the outer end of the arm F of the crank A B C D E, and secured at its free end to said arm F by means of the guide-pin H and the set-screw I, all constructed and fitted together as specified, to form an improved clamp for augers or bits.

ISAAC HOLLIDAY.

Witnesses:

GEO. W. MABEE, James T. Grahám.