W. H. DAILEY.

DRILLS FOR SOCKET-COUPLINGS.

No. 195,100. Patented Sept. 11, 1877.

Fig. 1.

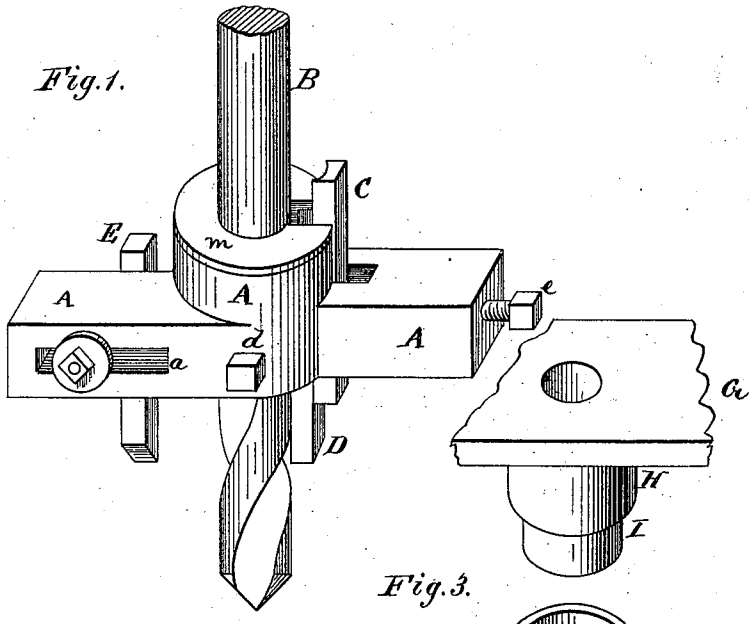


Fig. 3.

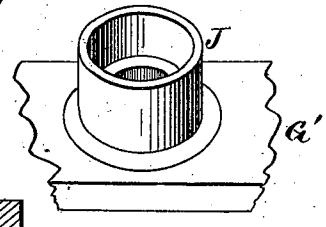
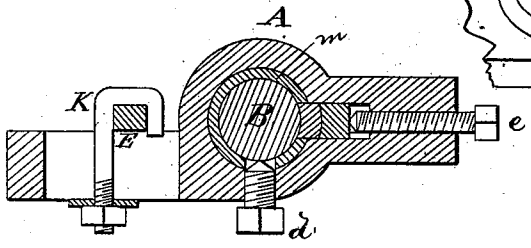


Fig. 2.



WITNESSES

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IMPROVEMENT IN DRILLS FOR SOCKET-COUPLINGS.

Specification forming part of Letters Patent No. **195,100**, dated September 11, 1877; application filed February 26, 1877.

To all whom it may concern:

Be it known that I, WILLIAM HENRY DAILEY, of Omaha, in the county of Douglas and in the State of Nebraska, have invented certain new and useful Improvements in Socket-Coupling Drilling; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction and arrangement of a cutting device to be used with drills for making socket-couplings for carriages, as will be hereinafter more particularly set forth.

In order to enable those skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

In the accompanying drawings, making part of this specification, Figure 1 represents a perspective of my tool; Fig. 2, a cross-section of same; and Fig. 3, perspective views of the work it is to perform.

In the figures, A represents a head, which holds the cutters. B represents a metal auger or boring-tool, which passes through the head A, and which is intended for boring the bolt-hole in the coupling. C and D represent two cutters, which are secured in a slot upon one side of the head A, and E represents a cutter which is secured in a slot in the other side. The cutters C and D are secured in position by means of the set-screw *e*, and the cutter E is secured by means of a set-screw or loop and nut K. The boring-tool B is secured in the head A by means of a set-screw, *d*. G and G′ represent two pieces of metal, upon which are formed two solid hubs, from which the couplings are to be formed.

To use this device, the boring-tool B is secured in a drilling-machine, and one of the bars G or G′ placed beneath it. To form the socket on bar G′, the cutters E and D and C are placed in the position seen in Fig. 1. The tool B cuts the hole in the bar and hub for the bolt to pass through, the tool or cutter D cuts the socket or inner periphery of the hub, and the cutter E cuts the outer periphery. The cutter C is placed in such position that when the socket has been cut deep enough it finishes off the edge of the barrel formed by the other two cutters. When the corresponding part is to be formed on bar G, the cutter D is raised and the cutter C is dropped below it.

By this arrangement, when the tool B cuts the center bolt-hole the cutter C cuts the barrel I and the cutter E cuts the barrel H, while the cutter D serves to finish off the outer end of barrel I.

It will readily be seen that by a simple movement of the cutters different-sized sockets can be cut, and that the same tool may be used for cutting both the male and female parts of the coupling.

m represents a thimble, which passes through the head A, and through which the boring-tool passes. This thimble may be varied in size to suit the size of the tool which passes through it.

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

The head A, with its cutters C D E, adjusted and arranged as described, in combibination with the tool B, as and for the purpose specified.

In testimony that I claim the foregoing I have hereunto set my hand.

WILLIAM HENRY DAILEY.

Witnesses:

HIRAM A. STURGES,

A. HOSPE, Jr.