F. M. CLEMONS.

DIES FOR SHAPING SHOVEL-SOCKETS.

No. 192,232. Patented June 19, 1877.

Fig. 1

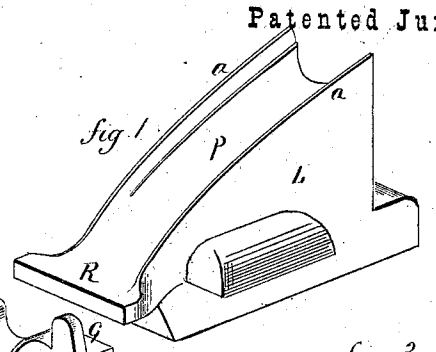


Fig. 2

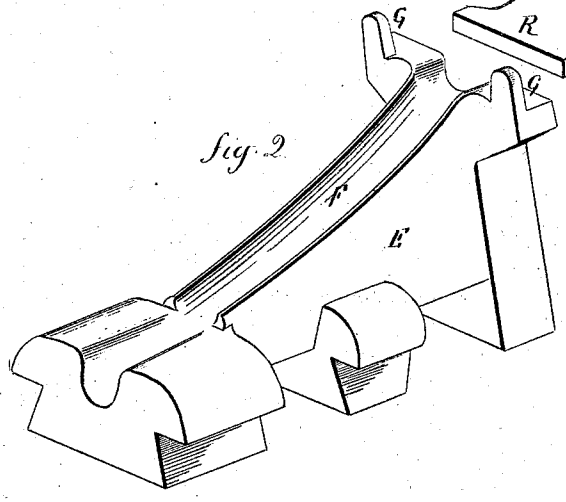


Fig. 3

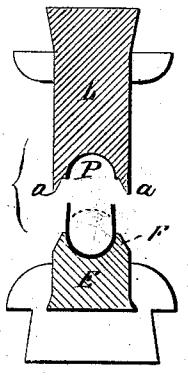


Fig. 4

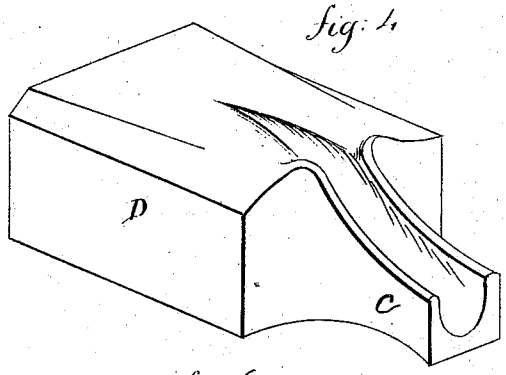


Fig. 6.

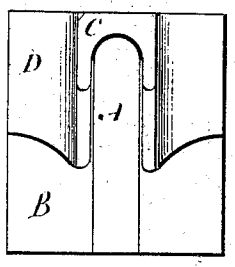
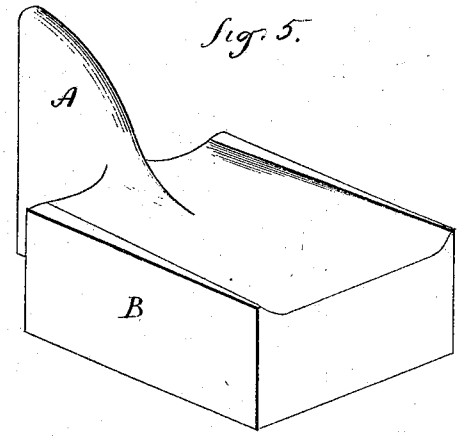


Fig. 5.



Witnesses.

J. A. Shumway

Clara Broughton.

Fred'k M. Clemons

Inventor.

By Atty. John E. Earle

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

FREDERICK M. CLEMONS, OF SEYMOUR, ASSIGNOR OF TWO-THIRDS HIS RIGHT TO ROYAL M. BASSETT AND THEODORE S. BASSETT, OF BIRMINGHAM, CONNECTICUT.

IMPROVEMENT IN DIES FOR SHAPING SHOVEL-SOCKETS.

Specification forming part of Letters Patent No. **192,232**, dated June 19, 1877; application filed May 12, 1877.

To all whom it may concern:

Be it known that I, FREDERICK M. CLEMONS, of Seymour, in the county of New Haven and State of Connecticut, have invented a new Die for Shaping Shovel-Sockets; and I do hereby declare the following, when taken in connection with the accompanying drawings, and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent in—

Figures 1 and 2 perspective views of the two parts of the die; Fig. 3, transverse section of the two parts as in operation; Figs. 4, 5, and 6, views of the striking-up die.

This invention relates to a die for closing and shaping tubular sockets of shovels and similar implements, with special reference to the manufacture of the shovel known as the Lowman patent—that is, struck up from a sheet of metal, socket and blade in one piece; but applicable to closing and shaping sockets of other shovels and implements. It is necessary that the socket be first struck into U shape.

In the manufacture of the Lowman shovel this is done by a projection, A, on the die B of ∩ form, and a corresponding reverse projection, C, on the die D. These come together, as seen in Fig. 6, and form the socket in ∩ form, and at the same time shape the shovel; but the shaping of the shovel is not essential to the socket-forming dies which I will now proceed to describe.

E is the lower part of the die, in the upper side of which is a cavity, F, of semicircular form in transverse section, and curved longitudinally, corresponding to the upper line of the socket to be formed. At the front end of this die a stop or stops G are arranged, against which the blade or tongue of the socket, as the case may be, will rest and serve as a guide for the introduction of the partially-formed socket, as seen in Fig. 3, the partially-formed socket denoted in solid black. L is the upper part of the die, constructed with a cavity, P, of semi-cylindrical form, and longitudinally the reverse of the die E, and is also constructed with lips *a* to overlap the edges of the part E, or the lips may be on the other part. At the end R the cavity runs into the form for the back of the shovel or tongue, as the case may be.

The partially-formed socket is placed in the lower part, as seen in Fig. 3, and then the upper part L struck down thereon, the edges turning into the cavity P, and by that closed over into cylindrical form, as denoted in broken lines, and at the same time shaped longitudinally.

The first operation, or partially forming of the socket for the action of this improved die, may be made by dies substantially such as shown in Figs. 4 and 5, or the socket may be rolled into that shape.

If for a socket only for an attachment to an implement, it will be understood the socket must be first cut with the tongue, by which to attach it to the implement.

In the patent of Lowman, before referred to, No. 142,859, dies are shown and described for shaping the socket for the handle; but the division of the dies is transverse to the plane of the handle, hence necessitating the employment of a mandrel, around which the metal is bent by the dies to form the socket. I therefore do not wish to be understood as broadly claiming dies for shaping the sockets of shovels and similar implements.

I claim—

The herein-described dies for shaping sockets of shovels and similar implements, consisting of the two parts E L, their faces or division in a plane parallel to the plane of the implement, and each constructed with a cavity semi-cylindrical in transverse section, and longitudinally the shape of the socket to be produced, one of the parts provided with stops G, substantially as and for the purpose described.

FREDERICK M. CLEMONS.

Witnesses:

HY. F. WARRING,

G. C. MOORE.