(No Model.)

J. W. BAILEY.

DEVICE FOR MAKING POST HOLES.

No. 382,853. Patented May 15, 1888.

Fig. 1.

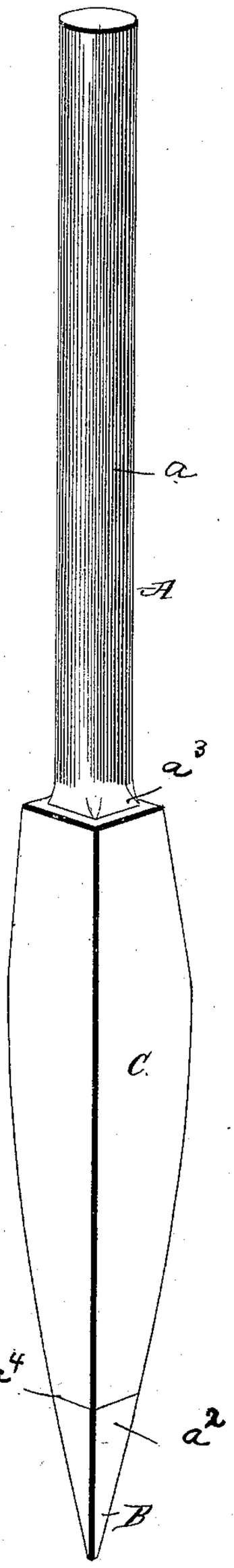
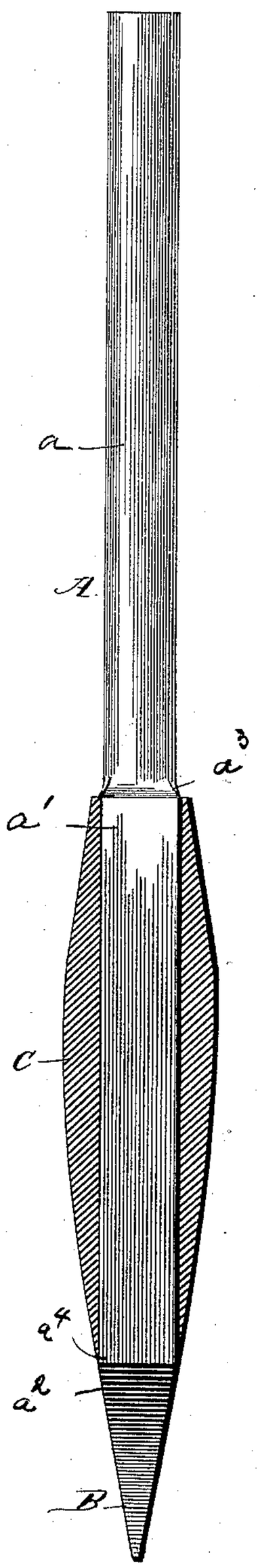


Fig. 2.



Witnesses.

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UNITED STATES PATENT OFFICE.

JUSTUS W. BAILEY, OF MANSFIELD, PENNSYLVANIA.

DEVICE FOR MAKING POST-HOLES.

SPECIFICATION forming part of Letters Patent No. 382,853, dated May 15, 1888.

Application filed September 12, 1887. Serial No. 249,484. (No model.)

To all whom it may concern:

Be it known that I, JUSTUS W. BAILEY, a citizen of the United States, residing at Mansfield, in the county of Tioga and State of Pennsylvania, have invented a new and useful Improvement in Making Post-Holes, of which the following is a specification.

My invention is an improved device for making post-holes; and it consists in certain novel features hereinafter described and claimed.

In the annexed drawings, Figure 1 is a perspective view of my improved device, and Fig. 2 is a central vertical section of the same.

Referring to the said drawings by letter, A designates a central metallic bar, the upper part of which is cylindrical to serve as a handle. The lower end of this central bar is slightly enlarged, and is tapered at its extremity to a point, B. Just above the point B, I cast upon the central bar the wedge-shaped or tapered body C, which may be either angular or circular in cross-section. This cast body B is tapered at its upper end as well as at its lower.

In manufacturing my device I first provide a mold of the proper configuration. The steel bar A is then inserted through the mold with its point B projecting therefrom, and melted iron then poured into the mold, so as to be cast around the bar A and intimately connected thereto. By this means I form a very simple bar for making post-holes at a slight cost. The bar is very strong and cannot be easily bent.

Heretofore it has been common to use steel bars for the purpose for which my device is employed; but the expense attendant upon making the same the proper size for their successful operation was a very serious objection to their use. To overcome this objection cast-iron bars were employed; but they were soon bent out of shape. My device overcomes both these objections and provides a tool by which post-holes can be readily formed and in the proper shape to receive the post without the use of any other tool, so that when the post is set in the post-hole it is at once held firmly and snugly in place.

The manner of using my device will be readily understood. The bar is driven vertically downward into the ground at the point where it is desired to set the post, and after being driven to the desired depth is withdrawn, leaving a hole in which the post will fit snugly when driven thereinto. It will be understood, of course, that the bar is to be made of a size and cross-sectional contour corresponding to the post to be set; and it will be observed that as the cast body is tapered at both ends the top of the post-hole will not be enlarged to such an extent that the post will set loosely therein.

The lower portion of the cast body is tapered, so as to merge into the taper of the point B and form a continuous unbroken surface therewith, thereby preventing the formation of obstructions to the passage of the bar into the ground.

The bar A is of steel, and has the three parts, which are as follows: the highest cylindrical part, a, which serves as a handle when using the utensil, the end a^2, having its sides converging downward to a point, and the intermediate part, a', somewhat larger in cross-section than the cylindrical part a, forming therewith the shoulders a^3, and square in cross-section. The said part forms with the end portion the shoulders a^4. The part C, being of cast metal and founded on the steel shaft, contracts thereon when cooling, and the upper and lower shoulders, a^3 a^4, respectively, by engaging the upper and lower ends of the casting, keep it fixed in position and as firm as if it were integral on the steel stem. Thus a plunger is formed consisting of the integral stem of steel, and having the point formed upon it, and a cast portion, C, surrounding the part a' of said stem and held thereto by the shoulders a^3 a^4. This plunger is as solid as if all parts were integral, but can be made much more quickly and easily and at much less cost than if made entirely of steel or if the parts were made integrally.

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

The herein-described device for making post-holes, consisting of the steel bar A, having the cylindrical part a, the point a^2, and the part a' between said point and the cylin-

drical part, which part a' is larger in diameter than the cylindrical part a and is rectangular in cross-section, and the cast-iron portion C, which has its sides aligned with the point B of the stem A, and is held on said stem by its contraction from a molten state upon the shoulders a^3 a^4 of the stem A, substantially as specified.

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

JUSTUS W. BAILEY.

Witnesses:
MART KING,
HENRY ALLEN.