(No Model.)

W. EVANS.

STAKE POCKET.

No. 410,731. Patented Sept. 10, 1889.

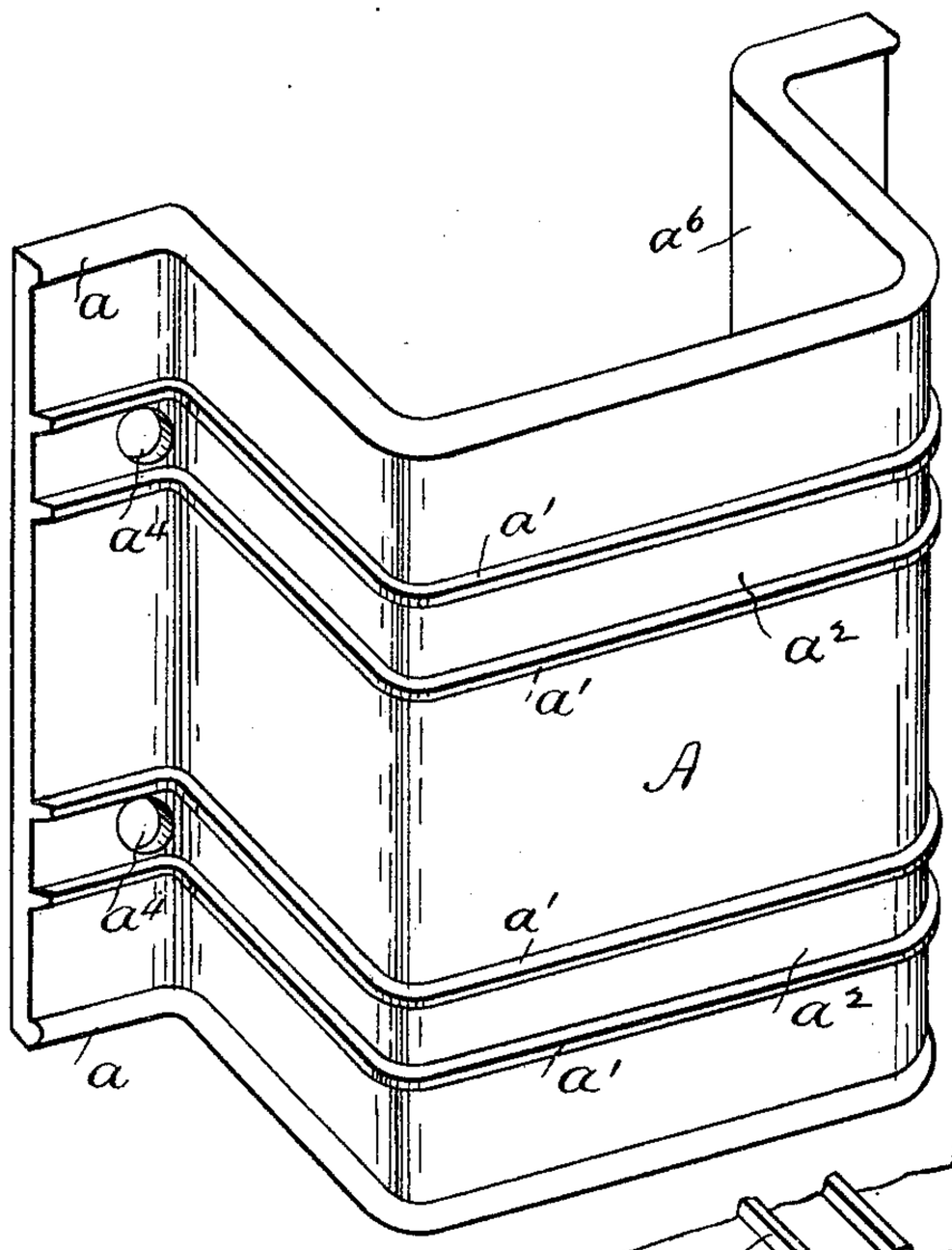


Fig. 1

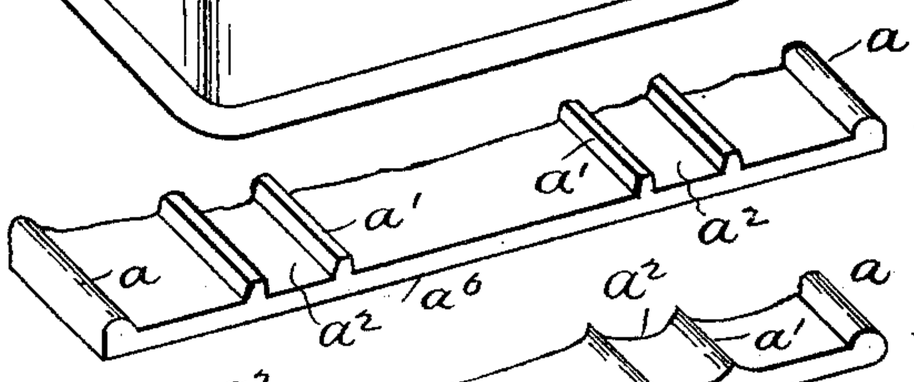


Fig. 2

Fig. 3

Fig. 4

Fig. 5

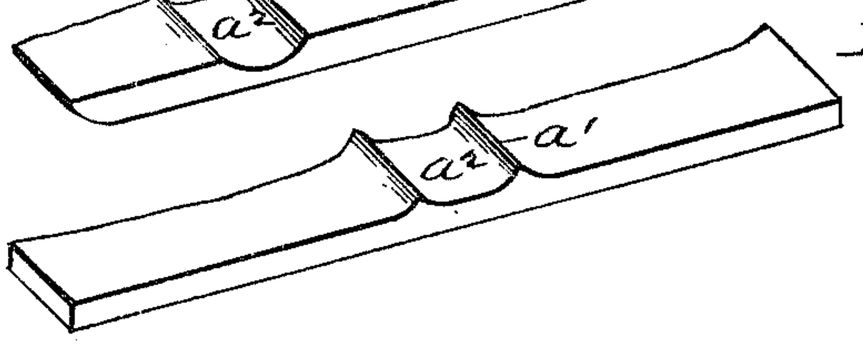
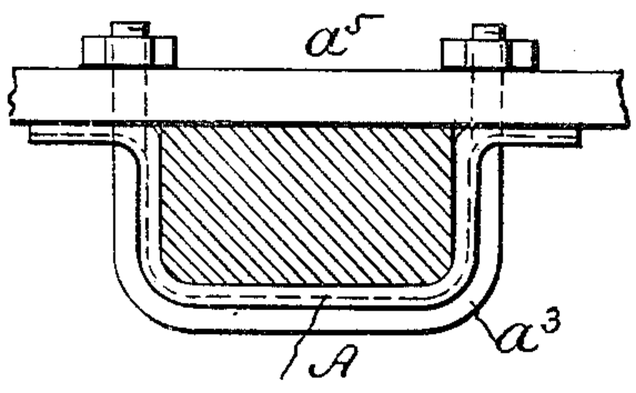


Fig. 6



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UNITED STATES PATENT OFFICE.

WILLIAM EVANS, OF PHILADELPHIA, PENNSYLVANIA.

STAKE-POCKET.

SPECIFICATION forming part of Letters Patent No. 410,731, dated September 10, 1889.

Application filed August 20, 1888. Serial No. 283,289. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM EVANS, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Stake Pockets or Holders, of which the following is a specification.

My invention has relation to railway-car or other like stake pockets or holders of wrought or sheet metal having integral bead edges and clip or strap socket projections or sides.

Heretofore, so far as I am aware, in making wrought-metal stake-holders, a suitable length of plain wrought or sheet metal of an even thickness throughout is heated and subjected to compression in one or more sets of suitably-shaped dies, which upset the metal to form the bead edges and the strap-socket projections. In forming the pocket between compression-dies, as above described, the pocket is shaped and at the same time the edge beads and strap-holding socket projections are struck up. The effect whereof is that in striking up said beads and projections the metal adjacent thereto is drawn in one direction and crowded up in another, resulting in decreasing the thickness of the metal at the projections and consequently weakening the pocket. Furthermore, such crowding and drawing of the metal in or between the dies has the effect of straining the pocket out of shape and of making its edges assume an irregular or wave-like form in outline, so that the pocket must be inserted between other or finishing dies to correct such described irregularity in shape, and its edges are subsequently ground to make them approximately straight. In other words, it is obvious that owing to the drawing and crowding of the metal in the operation of bending the pocket into shape and striking up its edge and strap-socket projections between compression-dies to form a perfect or finished pocket of equal strength and thickness throughout cannot be accomplished, and to avoid such described objections of weakening the pocket at its struck-up projections and of making it imperfect or unfinished is the object of my invention, and in doing so I provide an inexpensive sheet-metal pocket of perfect form, which is exceedingly strong and durable.

In carrying my invention into effect I form the edge flanges or beads and strap-socket on the sheet-metal plate as it is rolled or made, then cut it into suitable lengths, and then heat and shape the lengths into pockets or holders, such shaping being accomplished by means of shaping-dies, or in any other suitable manner.

My invention accordingly consists of a wrought-metal stake pocket or holder having the bead edges and the projections for the strap-sockets rolled or wrought on the sheet-metal blank or plate, as it is made substantially as hereinafter described in the specification, and pointed out in the claims.

Reference is had to the accompanying drawings, wherein Figure 1 is a perspective of a stake-holder embodying my improvements. Fig. 2 is a perspective of part of the sheet-metal blank or plate from which the holder is made. Figs. 3, 4, and 5 are perspectives of modified forms of sheet-metal blanks having the bead edges and strap-sockets rolled therein; and Fig. 6 is a plan, partly sectional, of the holder, stake, and part of the car.

A represents the stake pocket or holder, made of wrought or sheet metal, having integral top and bottom bead edges a a, respectively, and intervening projections a' a', to form sockets a^2 for the clip-strap or other fastening medium a^3, which pass through the openings a^4 in the pocket to secure the latter to the car a^5. (See Fig. 6.) Said pocket or holder is made from a sheet-metal plate of the form shown in Fig. 2—that is to say, the bead edges a and the strap-sockets a^2 are rolled or made integral with the plate A when it is made or rolled, so that by cutting off suitable lengths of said plate and heating them all that is required to do to make the pocket or holder is to bend them into the form desired for the pocket.

The heated lengths may be shaped in dies or otherwise, as desired.

The blank shown in Fig. 2 and the holder formed therefrom (shown in Fig. 1) have smooth or uncorrugated inner sides a^6, so that there is a greater thickness of metal at the strap-socket projections a' for the strap-sockets and at the bead edges than elsewhere to strengthen said parts; but where excessive strength, combined with lightness of material,

is not essential, the under sides of the strap-socket projections and bead edges may be corrugated, as shown in Fig. 3, in which case the sheet-metal plate is substantially of an even thickness throughout.

If desired, two strap-sockets may be rolled in or formed on the sheet-metal plates, or only one may be formed thereon, and the bead edges may be dispensed with, as shown in Fig. 5. So, too, if desired, instead of having raised projections a' on the plate to form the strap-sockets, they may be provided for by rolling or forming grooves in the plate, as shown in Fig. 4, in which case the plate is of a greater thickness than is the case in the forms first above described.

Any suitable form of bead edges and strap-sockets in cross-section may be used, as I do not limit my invention to any configuration of the same nor of the holder.

From the foregoing it will be observed that as the edge beads and strap-socket projections are formed on the blank or sheet-metal plate, such projections extend across the side flanges or bearings of the pockets when they are bent into shape, and as the latter operation involves no striking up of said projections a perfect or finished pocket is shaped or formed; and such pocket may be corrugated on the inside, or may be smooth and unbroken on its inner surface, as shown in Figs. 1, 2, 4, and 5. I prefer to form the pocket with a smooth inside, as the latter then affords an unbroken long length of bearing for the stake when inserted therein, the same as in the plain sheet-metal or cast-iron pockets now in use, whereas when the inside of the pocket is corrugated the bearings for the stake are from the edges of the pocket to the inside corrugations and between the latter, which bearings being short ones afford but little support, and the edges of the corrugations form lines of wear for the stake to deteriorate the same.

What I claim is—

1. A stake pocket or holder made from a blank of wrought metal having outside edge beads or flanges and strap or clip socket rolled or formed in the blank, substantially as set forth.

2. A stake pocket or holder made from a blank of sheet metal having outside edge beads or flanges and strap or clip socket projections rolled or formed in the blank, the edge beads and strap-pocket projections being of greater thickness in cross-section than the rest of the blank or holder, and the latter having a smooth or uncorrugated inside surface from top to bottom, substantially as set forth.

3. A stake pocket or holder made from a blank of wrought or sheet metal, having strap-sockets formed or rolled in the blank, and the holder having a smooth or uncorrugated inside surface from top to bottom, substantially as set forth.

4. A blank sheet-metal strip for stake pockets or holders having one smooth or uncorrugated side, and on the other side strap-sockets and bead edges formed or rolled thereon, substantially as set forth.

5. A blank sheet-metal strip for stake pockets or holders having one smooth or uncorrugated side, and on the other side strap-sockets a^2, formed or rolled thereon, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM EVANS.

Witnesses:

ROBERT EVANS,

J. DANIEL EBY.