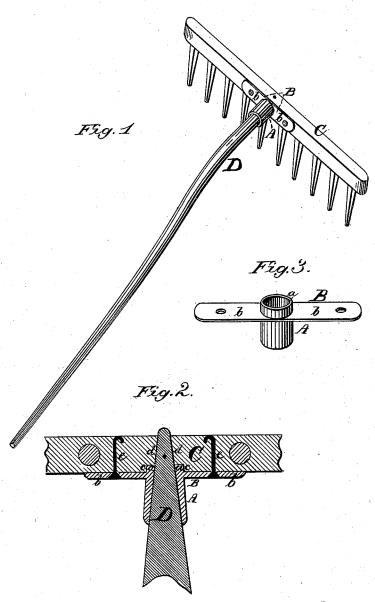
## T. I. CAMPBELL. Hand-Rake.

No. 197,825.

Patented Dec. 4, 1877.



E. E. Court. Jno. P. Brooks. Inventor: Timothy & Campbell by C. S. Snow & C. actorneys:

## UNITED STATES PATENT OFFICE.

TIMOTHY I. CAMPBELL, OF EAST KOY, NEW YORK, ASSIGNOR TO CAMPBELL BROTHERS, OF SAME PLACE.

## IMPROVEMENT IN HAND-RAKES.

Specification forming part of Letters Patent No. 197,825, dated December 4,1877; application filed June 22, 1877.

To all whom it may concern:

Be it known that I, TIMOTHY I. CAMPBELL, of East Koy, in the county of Wyoming and State of New York, have invented certain new and useful Improvements in Hand-Rakes; 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 which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of a rake having my improvement. Fig. 2 is a sectional view of the same, and Fig. 3 is a perspective view of the socket detached.

Similar letters of reference indicate corre-

sponding parts in all the figures.

This invention relates to an improved method of attaching the handles to rake-heads by the use of a socket of the construction hereinafter described, which, while adding but little to the cost of the rake, makes it more durable and proportionately valuable.

The socket which I employ in carrying out my invention is made of cast-iron, and of the shape shown in section in Fig. 2 of the drawings—that is, consisting of a sleeve, A, conical or tapering in shape, so as to correspond with the taper of the lower end of the rakehandle D, as shown in Fig. 2. Near its lower end the sleeve A has two laterally-projecting wings, b b, forming a plate, B, which is cast in one piece with the sleeve, and completes the socket.

The lower end of the sleeve, it will be ob-

served, projects below the plate, as shown at a. In adjusting the socket upon a rake-head this portion is fitted into a recess, c, forming the upper end of the perforation d, which is made in the rake-head C, to receive the handle. The socket is then secured in position upon the rake-head by nails or screws e e, the wings b b having perforations for this purpose. Finally, the handle is driven in firmly and secured with a nail through the rake-head, in the usual manner.

It is well known that in hand-rakes as now ordinarily constructed the point at which the handle is attached to the rake-head is the weakest and most liable to break. By my improvement the rake head and handle are both braced and strengthened, the additional weight is trifling, and the cost of making the improvement is but slight.

improvement is but slight.

Having thus described my invention, I claim and desire to secure by Letters Patent of the

United States-

The combination of the rake-head C, having recess c, with the tapering rake-handle D and brace or fastening B, consisting of tapering socket-piece A, having laterally-projecting wings b and annular shoulder a, substantially as described, for the purpose herein shown and specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in

presence of two witnesses.

TIMOTHY I. CAMPBELL.

Witnesses:

C. C. LATHROP, H. BLODGET.