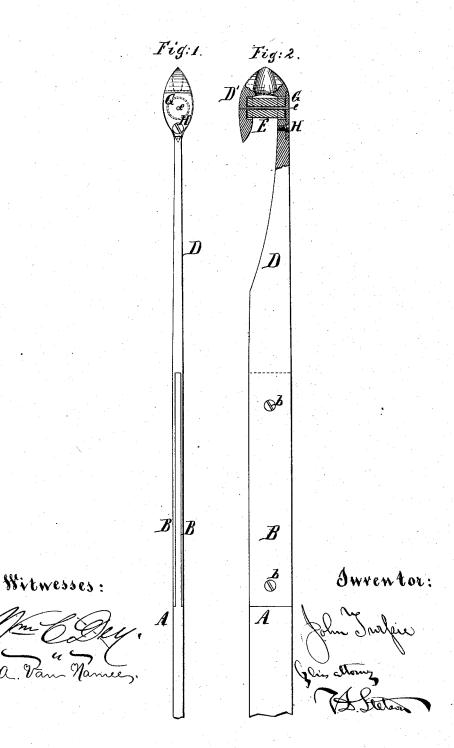
## J. TURPIE. Filling-Hook for Weaving Hair Cloth.

No. 164,949.

Patented June 29, 1875.



## UNITED STATES PATENT OFFICE.

JOHN TURPIE, OF NEW YORK, N. Y., ASSIGNOR TO HIMSELF AND EDWARD H. FAULKNER, OF SAME PLACE.

## IMPROVEMENT IN FILLING-HOOKS FOR WEAVING HAIR-CLOTH.

Specification forming part of Letters Patent No. 164,949, dated June 29, 1875; application filed May 31, 1875.

To all whom it may concern:

Be it known that I, JOHN TURPIE, of New York city, in the State of New York, have invented certain Improvements in the Construction of Filling-Hooks for Use in Looms for Weaving Hair Cloth and analogous material, of which the following is a specification:

In the act of weaving with a filling of horsehair, it is common to introduce the hairs one by one by means of a hook with a roll in the throat. The hook is carried on the end of a rod or staff, which is alternately thrust through the shed and withdrawn by the action of an attendant or by machinery. The hooks in common use for this purpose are of wood, with wire guards to keep the hairs from slipping off either end of the roll. The destructive wear tends to rapidly incapacitate some of the parts for service, and there was no provision for replacing some of the important parts short of the destruction of the entire hook and the replacing it with another.

I have devised a strong and compact construction of metal of a very enduring character. The parts liable to wear may be renewed with little trouble.

The accompanying drawings form a part of this specification, and represent what I consider the best means of carrying out the invention.

Figure 1 is a side elevation; and Fig. 2, a plan view, partly in horizontal section.

Similar letters of reference indicate like parts in both the figures.

A is the end of a rod, which may be extended to any length required, and attached to suitable machinery or operated by hand. B B are thin plates of iron, attached, by screws b, to the rod A, and welded or otherwise firmly united to the solid hook D D', which is thus made a practical extension of the rod. The main rod of the hook is denoted D, and the return bend D'. A roll, E, is mounted in the position represented, turning on a pin, e, which is set in the bend D' of the hook, and is steadied in the movable piece G, which is dovetailed in a recess in the opposite side of the hook, and secured by a screw, H, as shown. The parts D and D' are made wide at the point where the

roll is received, as shown in Fig. 1. The portion where they are connected is made thin, as indicated in dotted lines in the same figure. The hole in the return bend D' is a very little larger than the diameter of the pin e. The corresponding hole in the plate or slide G may be bored from the inner side. It is tapered, and a small hole only opens quite through. The pin e, on being thrust in from the side D', is wedged or pinched tightly in the tapering hole in G, and the friction thereby caused insures its retention.

When, for any reason, it becomes necessary to remove the roll E, the pin e is forced endwise by the insertion of a point through the small end of the hole, and the pin e is detached from its seat, so that its other end projects beyond the face of the bend D'. The projecting end may then be seized and the entire pin drawn out. After this the screw H may be taken out. Then the slide G may be moved laterally, and the roll E may then be taken out endwise and a new one substituted, after which all the parts may be again restored to their place.

The recesses to receive the ends of the roll E should have only a little greater diameter than the roll itself. There is no danger of a hair being drawn in and passing over the end of the roll. The only guides for the hair that are needed about this hook are the inner faces of the parts D and D' immediately adjacent to the roll.

I claim as my invention-

1. The filling-hook described, having the roll E recessed into the parts D D', with its ends completely surrounded thereby, as and for the purposes herein specified.

2. The dovetailed slide G and fastening means H, in combination with the hook D D', roll E, and supporting pin e, as and for the

purposes herein specified.

In testimony whereof I have hereunto set my hand this 28th day of May, 1875, in the presence of two subscribing witnesses. JOHN TURPIE.

Witnesses:

W. C. DEY, HENRY GENTNER.