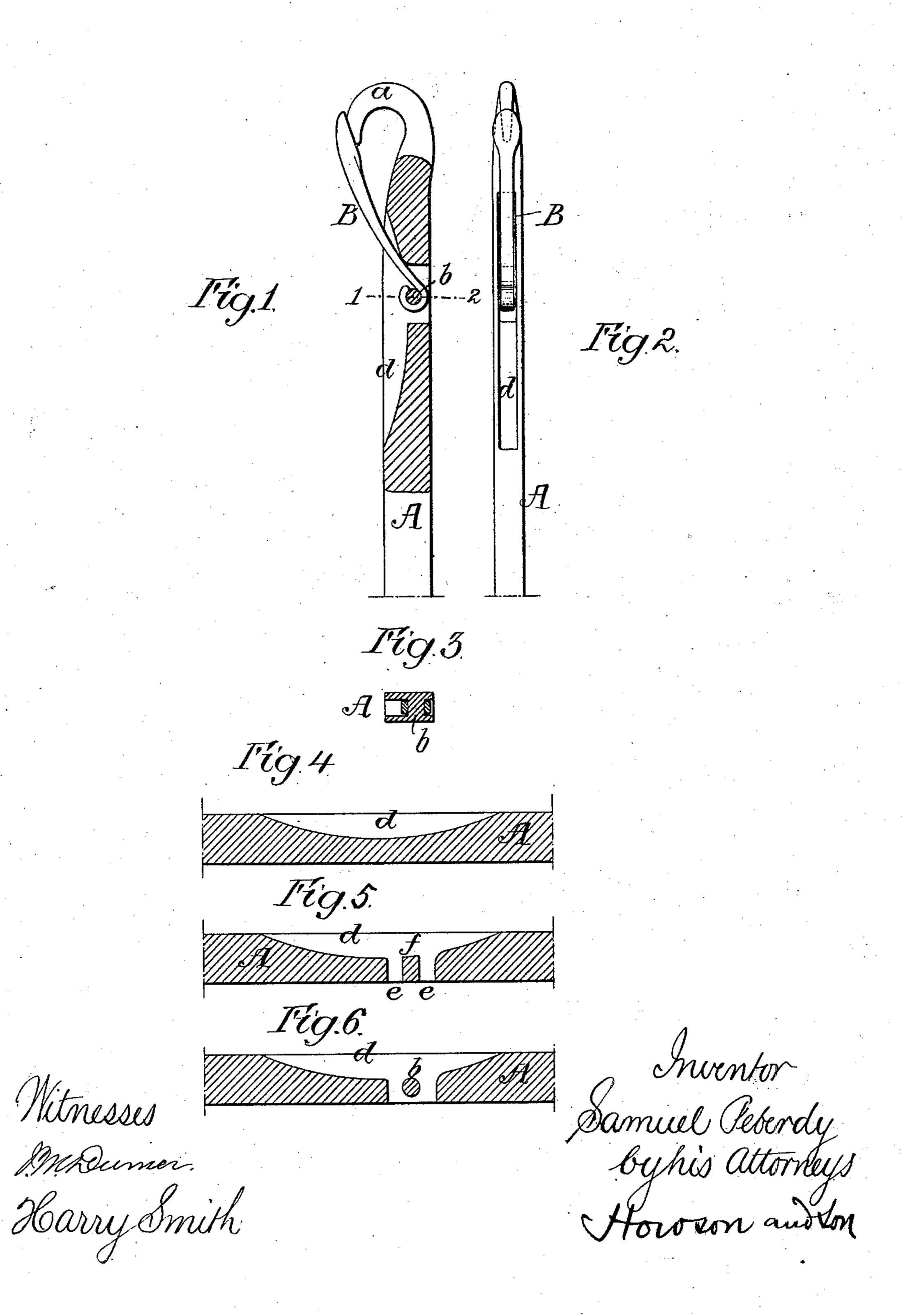
## S. PEBERDY. Knitting-Machine Needle.

No. 219,012.

Patented Aug. 26, 1879.



## UNITED STATES PATENT OFFICE.

SAMUEL PEBERDY, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF ONE.
THIRD HIS RIGHT TO HENRY HOWSON, OF SAME PLACE.

## IMPROVEMENT IN KNITTING-MACHINE NEEDLES.

Specification forming part of Letters Patent No. 219,012, dated August 26, 1879; application filed June 23, 1879.

To all whom it may concern:

Be it known that I, Samuel Peberdy, of Philadelphia, Pennsylvania, have invented a new and useful Improvement in Knitting-Machine Needles, of which the following is a

specification.

My invention relates to improvements in latch-needles for knitting-machines, either ordinary latch-needles or those for which Letters Patent No. 206,354 were granted to me July 23, 1878; and the object of my invention is to make a more durable needle than those now in use, by bending a portion of the latch around the pivot-pin, and making the pivot-pin an integral part of the shank, all as described hereinafter.

In the accompanying drawings, Figure 1 is a side view, drawn to an enlarged scale, and partly in section, of my improved knitting-needle; Fig. 2, an edge view of the same; Fig. 3, a transverse section on the line 12; and Figs. 4, 5, and 6 views showing the mode of making the slot and pivot-pin in the shank.

The shank A of the needle, which may be of the shape adopted in making ordinary latchneedles, has the usual hooked end a; but the pivot-pin b, instead of being inserted through the slotted shank and through the eye of a latch and then riveted, is a part of the shank itself, and may be made in the manner illus-

trated by Figs. 4. 5, and 6.

In Fig. 4, d is a slot made by a milling-cutter or otherwise in the shank, to about the depth shown; and in Fig. 5 e e are two holes punched or otherwise made through the shank from the bottom of the slot d, leaving in the latter the transverse piece f of metal, forming part of the shank, and this cross-piece is reduced and converted by swaging, or in any other suitable manner, into a pivot-pin, b, Fig. 6. The latch B is similar, as far as its outer

end is concerned, to ordinary latches, the stem, however, instead of terminating in the usual eye for receiving the pivot-pin is elongated, and is so flexible that it can be bent around

the pivot b, as shown in Fig. 1.

The latch with flexible stem may be combined with a shank having the usual riveted pivot-pin; but I prefer in all cases to make the pin an integral part of the shank itself, substantially in the manner described above, as it obviates the necessity of punching the cheeks of the shank, saves the expense of a detachable pin, and the tedious manipulation required in riveting the pin. The shank, moreover, with the pin b forming part of the same is much less liable to break than the ordinary shanks, and the latches are less liable to be detached. The latch itself is cheaper than ordinary latches with punched eyes; and it possesses this advantage over ordinary latches that it can be tightened to the pin whenever it becomes loose by the simple application of pressure to the bent portion which embraces the pin.

My invention may be adopted in manufacturing the needles, for which Letters Patent No. 206,354 were granted to me on the 23d of

July, 1878.

I claim as my invention—

A latch-needle in which a shank having a pin, b, forming an integral part of the shank itself, is combined with a latch, part of which is bent round the said pin, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

SAMUEL PEBERDY.

Witnesses:

ALEXANDER PATTERSON, HARRY SMITH.