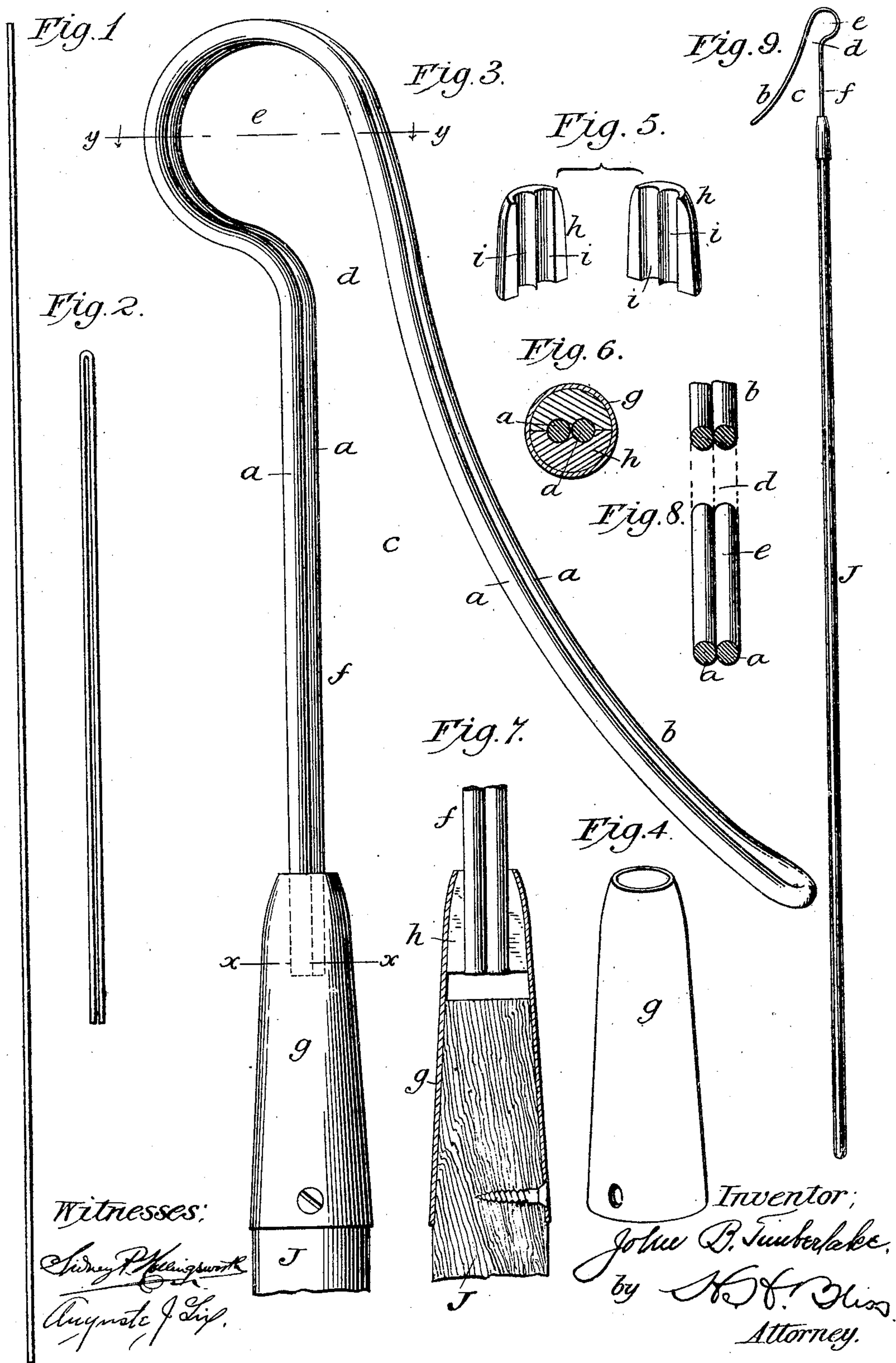


No. 797,988.

PATENTED AUG. 22, 1905.

J. B. TIMBERLAKE.  
SHEPHERD'S CROOK.  
APPLICATION FILED MAY 18, 1905.





# UNITED STATES PATENT OFFICE.

JOHN B. TIMBERLAKE, OF JACKSON, MICHIGAN.

## SHEPHERD'S CROOK.

No. 797,988.

Specification of Letters Patent.

Patented Aug. 22, 1905.

Application filed May 18, 1905. Serial No. 261,055.

*To all whom it may concern:*

Be it known that I, JOHN B. TIMBERLAKE, a citizen of the United States, residing at Jackson, in the county of Jackson and State of Michigan, have invented certain new and useful Improvements in Shepherds' Crooks, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to improvements in shepherds' crooks.

The essential features of structure and the matters of superiority and advantage attained are hereinafter set forth.

Figure 1 shows the initial blank or rod section from which I manufacture the crook part proper of the implement. Fig. 2 illustrates the blank at the second stage in the manufacture. Fig. 3 shows the metal part of the finished crook, full size, after it has been fastened to the handle. Fig. 4 is a perspective of the ferrule part as initially made. Fig. 5 is a perspective of the fastening device. Fig. 6 is a cross-section on line *xx*, Fig. 3. Fig. 7 is a vertical section. Fig. 8 is a section on line *yy* of Fig. 3. Fig. 9 is a side view of the complete implement.

Heretofore metallic shepherds' crooks have usually been made by forging a metal bar into the desired shape, and although crooks of this character have many superior features there are likewise certain inherent disadvantages incident to their construction, which it is one of the objects of my invention to overcome.

Another object of my invention is to reduce the cost of manufacture of metallic crooks.

Crooks of the kind referred to were made by an expensive forging process, commencing with taking a solid rod, shaping it at one end in such way as to provide a hollow conical socket for the attachment of a handle, and (by several steps of repeated heatings, swagings, and hammerings) shaping it at the other end so as to provide a leg-loop and an outwardly-extending arm with a tapering passage-way between the shank and the arm. Numerous cross-sectional shapes were necessary at the different points along the length of the metal bar in order to have the different parts of the crook adapted to meet the several functions that must be performed. Consequently these articles have been expensive and have required a high grade of skill for their manufacture. When made in

the way described, they have been necessarily so shaped that the region of flexibility and elasticity has been limited, the yielding of the metal under strain not being permitted at points between the inner end of the shank and the outer part of the loop, all the bending occurring between the outer end of the loop and the outer end of the laterally-projecting arm. Again, one of the principal difficulties has been the securing of a proper tempering of the metal. The fact is it has been practically impossible to secure this to the extent desired, the metal varying at different points so widely in its sectional shape and dimensions that uniformity of tempering cannot be attained.

I have discovered that an article of superior character can be cheaply and readily produced by using uniformly-tempered wire of the proper dimensions and shaping it in the way I will now describe.

In the drawings the crook is shown as formed of two strands of wire *aa*. A length of wire of suitable diameter is taken, and in following the preferred method this is doubled or bent back at its middle part to provide the two parallel strands. The blank thus formed is bent so that the strands are turned back upon themselves and the shape is obtained which is illustrated in Fig. 3—that is to say, the bending and shaping is so effected as to provide an outward or laterally extending arm *b*, a tapering passage-way *c*, a reduced throat at *d*, a leg-loop at *e*, and a shank part or stem *f*.

The strands are preferably parallel, particularly along that part of the length of the crook where there is liability to have contact with the animal's leg. A single wire or rod cannot be used, for if it be so heavy (that is, if it be of such long sectional diameter) as to be sufficiently strong it is devoid of elasticity and capacity for yielding to such an extent that it is practically rigid. Such yielding of the laterally-projecting arm is necessary in order to permit the easy and safe entrance and escape of the animal's leg, and high elasticity is necessary in order to have the different parts return to their normal positions and retain them after acts of bending have occurred. On the other hand, a single wire or rod of small gage or short sectional diameter cannot be used because of the tendency to cut or tear the skin or flesh of the animal; but by forming the crook of two strands of wire or wire-rod of relatively small gage and



arranging them side by side relatively to the axis of the loop I provide a wide surface for contact with the animal's flesh; second, I insure a capacity for bending to any ordinarily-required extent; third, provide for high elasticity, and, fourth, furnish a flexibility and elasticity which are distributed from the end of the handle along the shank or stem part to the leg-loop as well as along the laterally-extending arm from its outer end to the leg-loop. The labor in manufacture is reduced to a minimum. The high grade of metal-working skill necessary to form the peculiarly-shaped forged crooks that have been heretofore manufactured of solid or heavier metallic pieces by swaging or hammering is done away with, the present crook being formed rapidly by a mere wire-bending operation. Moreover, the several steps in the earlier manufacture incident to the tempering are obviated, inasmuch as the wire rod which I now employ is, at the wire-mill, at the time of the initial drawing given the temper which I require to provide the flexibility and elasticity peculiar to these crooks. The wire rod as received from the mill is worked up cold and all the labor and expense incident to the several stages of heating required for the forging in the earlier method of manufacture, as well as the careful and skilfully-conducted heating necessary for properly tempering the articles, are dispensed with.

The wire part or crook proper can be secured to the handle in any suitable way. I prefer, however, the method of fastening which is illustrated in the drawings. I insert the ends of the shank part or stem part of the strands into the end of a ferrule *g* and then lock them tightly to the ferrule by means of a block or mass of metal *h*. Preferably this is formed separately from the ferrule and in two sections, with grooves *i* on the faces of the sections. The end parts of the wire strands are placed in these grooves, and the metal block is then forced under powerful pressure into the end of the ferrule. In this way the crook part proper and the ferrule

become practically unitary and the article can be packed and shipped and sold independently of the handle part *J* and can at any time be attached to or detached from a handle when desired. In these respects the implement is much superior to one in which the crook part is secured directly to the end of the wood of the handle, in which case the fastening of the two parts must be effected at the factory and the handle must be packed and shipped as part of the article. In case of breakage of either the handle or the crook the unbroken part becomes useless to the shepherd and an entire new implement must be obtained, whereas with the present device the unbroken part—for instance, the crook—can be readily attached by the shepherd to a new handle, though at a distance from the shop or store.

What I claim is—

1. A shepherd's crook formed of two wire strands substantially parallel to each other from end to end and bent back upon themselves and shaped to provide an inward-tapering entrance, a leg-loop and a shank or stem part for attachment to the handle, the strands at the leg-loop being arranged side by side and adapted to uniformly and similarly contact with an animal's leg, substantially as set forth.

2. In a sheep catching and holding implement, the combination of the handle, the ferrule, the crook formed of two parallel strands of wire bent back upon themselves to form an outward-projecting arm, a tapering entrance for the animal's leg, a leg-loop and a shank or stem, and the separately-formed plug having apertures or grooves for the ends of the shank-strands and adapted to be fastened around their ends when in the end of the ferrule, substantially as set forth.

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

JOHN B. TIMBERLAKE.

Witnesses:

AUGUSTE J. LIX,  
H. M. Low.