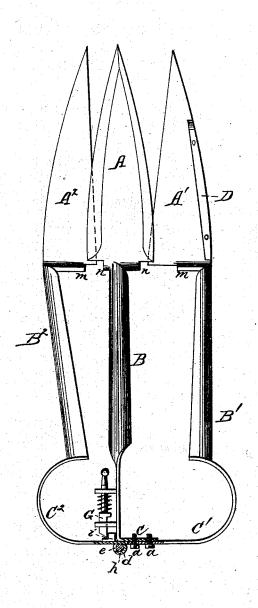
## W. H. PORTERFIELD & H. C. MALIN.

SHEEP-SHEARS.

No. 186,366.

Patented Jan. 16, 1877.



Witnesses. Banck L. Ourand H. C. In a arthur,

Inventors.

H. Posterfield &

7.H. Mexander Poo

Attorneys.

## UNITED STATES PATENT OFFICE.

WILLIAM H. PORTERFIELD AND HOWARD C. MALIN, OF BELMONT, OHIO.

## IMPROVEMENT IN SHEEP-SHEARS.

Specification forming part of Letters Patent No. **186,366**, dated January 16, 1877; application-filed November 27, 1876.

To all whom it may concern:

Be it known that we, WM. H. PORTERFIELD and HOWARD C. MALIN, of Belmont, in the county of Belmont and State of Ohio, have invented certain new and useful Improvements in Sheep-Shears; and we do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, and to the letters of reference marked thereon, which form part of this specification.

The nature of our invention consists in the novel construction of three-bladed sheep-shears, so arranged as to be easily taken apart and put together again by means of a lock and spring detent or bolts, to admit of sharpening or other repairs, as will be hereinafter more fully described and definitely claimed.

In order to enable others skilled in the art to which our invention appertains to make and use the same, we will now proceed to describe its construction and operation, referring to the annexed drawing, in which the figure is a side elevation of our invention.

A represents a triangular blade, formed or provided with a shank, B, of semi-tubular form, as shown. This blade A is formed with cutting-edges on both sides from the point to the heel. The end of the shank B forms a flat L-shaped foot, C, which is fastened, by screws a a, to the foot C¹, formed upon one end of another semicircular shank, B¹, and this latter shank has a blade, A¹, formed at its other end. The blade A¹ has only one cutting-edge adjacent to and operating in conjunction with one edge of the blade A. Along the back of the blade A¹, on one side, is a rib, D, to prevent the blades from nipping the skin of the sheep while being shorn.

The extreme end of the foot  $C^1$  is formed with eyes e e, in which is placed a pin, d, and on this pin is hooked a hook, h, formed on the end of still another foot,  $C^2$ . This foot is

formed at one end of a tubular shank,  $B^2$ , which has a blade,  $A^2$ , at its other end, corresponding in size and shape with the blade  $A^1$ , and operating in conjunction with the other cutting-edge of the center blade A. On the foot  $C^2$ , near the end, on the inner side, is a beveled lug or projection, i, over which springs a suitable detent or spring-bolt, G, arranged in suitable guides upon the center foot C, and thus holding the blade  $A^2$  in place.

The feet  $\widetilde{C}^1$  and  $\widetilde{C}^2$  are made of spring metal, so that the blades  $\widetilde{A}^1$  and  $\widetilde{A}^2$  will open outward from the center blade  $\widetilde{A}$ , and be pressed together by the hand grasping the shanks for cutting

At the heel of the blades  $A^1$   $A^2$  are formed shoulders m m, to come in contact with shoulders n n on the heel of the blade A, and prevent the blades  $A^1$   $A^2$  from striking each other.

The shears thus constructed can be used as single or double, and the change is easily effected by means of the bolt G.

If any part of the shears become broken it can easily be taken out and another substituted without rendering the whole shears useless.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

The combination of the removable blade  $A^2$ , formed with shank  $B^2$  and foot  $C^2$ , having hook h and beveled lug i, the feet C  $C^1$ , pin d, and spring bolt or detent G, all substantially as and for the purposes herein set forth.

In testimony that we claim the foregoing as our own we affix our signatures in presence of two witnesses.

WM. H. PORTERFIELD. HOWARD C. MALIN.

Witnesses:

OLIVER WRIGHT, PETER WOODMANSEE.