H. WENDT & H. SEYMOUR.

SHEEP SHEARS.

No. 45,198. Patented Nov. 26, 1864.

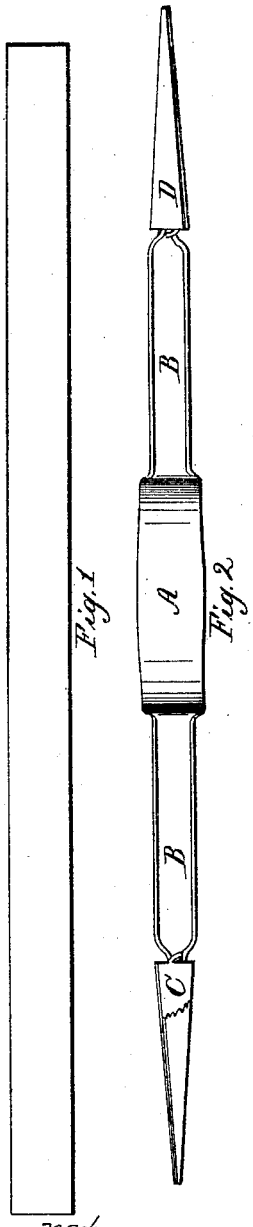

Fig. 1

Fig. 2

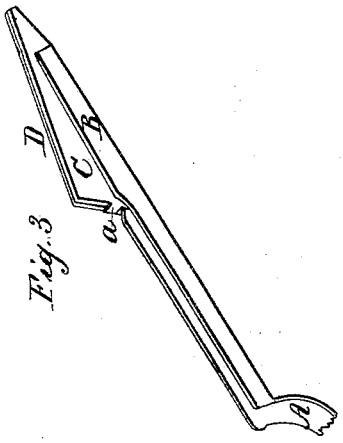

Fig. 3

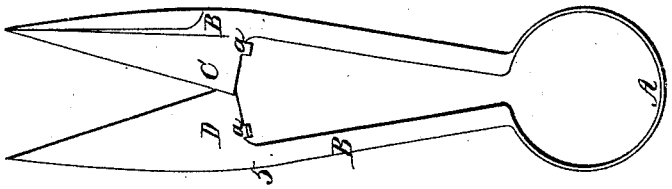

Fig. 5

Fig. 4

Witnesses

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UNITED STATES PATENT OFFICE.

HERMANN WENDT AND HENRY SEYMOUR, OF ELIZABETH, NEW JERSEY.

IMPROVEMENT IN THE MANUFACTURE OF SHEEP-SHEARS.

Specification forming part of Letters Patent No. **45,198**, dated November 22, 1864.

To all whom it may concern:

Be it known that we, HERMANN WENDT and HENRY SEYMOUR, both of Elizabeth, in the county of Union and State of New Jersey, have invented a new and useful Improvement in the Manufacture of Sheep-Shears; and we do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompaning drawings, making a part of this specification, in which—

Figure 1 is a plan view of the rolled sheet-iron blank out of which the frame is made. Fig. 2 is a plan view showing the appearance of the frame after it has been swaged into shape, with the rough blade-pieces attached, prior to welding; Fig. 3, a perspective view of one of the shanks or blade-holders and rough blade-blanks prior to welding; Fig. 4, a side elevation of blade back piece with attached stop; Fig. 5, a side elevation of the finished shears.

In the ordinary process of manufacturing sheep-shears one method is to make them wholly of a single piece of steel, hammered or forged out into proper shape by hand and then finished by grinding and polishing. This is a very slow and costly method and is rarely practiced. We mention it here that it may be understood that we do not intend to claim, broadly, the making of sheep shears of one piece of metal.

The method which is ordinarily practiced is to make the spring bow of steel and attach it to iron blade shanks or holders by rivets or other fastenings. This method is comparatively slow and expensive, and the steel spring is liable under use to become loose or detached from its rivets, and the shears are thus rendered soon worthless.

The object of our invention is to improve, simplify, cheapen, and quicken the whole process.

We make the spring and blade shanks in one piece of metal, of good rolled or hoop iron of the proper width, and cut it into a suitable length, as shown in Fig. 1, which represents a blank. This blank is now heated and placed in a swaging press, whereby at one blow of the hammer or drop it is converted into the form shown in Fig. 2, in which A is the spring and B B the blade shanks or holders, the latter bent into semi-tubular form.

The cutting-blades are composed of separate pieces or blanks C D, of rolled or sheet metal. The blank C (shown in Fig. 4) is composed of sheet-iron and forms a portion of the back of the blade. Each blank C has at its rear end a projection or ear, *a*, and these ears *a a* form the usual stops employed to prevent the blades from passing each other. In the ordinary process of manufacture these stops or ears *a a* are made of separate pieces of metal welded upon the rear ends of the blades.

After the blank has been swaged into the form shown in Fig. 2, the back blade-blanks, C, are placed one in each of the tubular extremities of the blade-shanks B B, as shown in Fig. 3, and against each blank C thus arranged, but outside of the tubular shank, a face or cutting-edge blank, D, similar in form to the blank C, (except that it has no stop *a* and is made of steel,) is now placed, as shown in Fig. 3, so as to form a cutting-face of steel, and both of said blanks, together with the shank-ends, are temporarily cemented and subsequently welded into a compact mass or cutting-blade.

The blades are finished by grinding and polishing upon stones in the ordinary manner, and when completed the face of each cutting-edge is composed of sheet-steel, backed by the iron plate C, both being held by the shank B, and all united, as shown in Fig. 5.

After the blank has been swaged up, as before described, and represented in Fig. 2, the part A, which is to form the spring, is hammered out so as to condense and harden the metal. This hammering also renders the part A wider, and likewise imparts to it a sufficient degree of elasticity to render it a good and durable spring.

The subsequent operations of polishing, tempering, setting the blades, and finishing are done in the usual manner, and no particular description thereof is necessary.

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

As a new article of manufacture, the sheep-shears hereinbefore described, consisting of the back A and blanks B B, swaged in one piece, the iron blade-plates C C, straps *a a*, and steel blade-plates D D, all constructed and combined in the manner and for the purposes specified.

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