No. 49,609

Charles H. Dana, Machine for making Sheep Labels:

Patented Aug. 29. 1865.

Fig. 1.

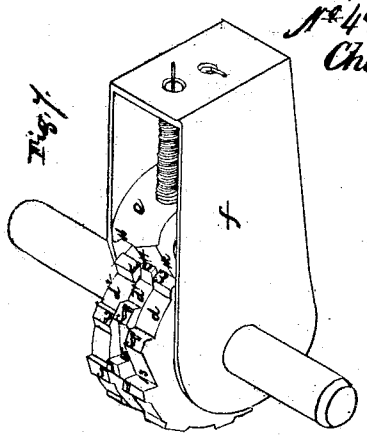


Fig. 5.

Fig. 6.

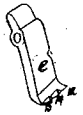


Fig. 4.

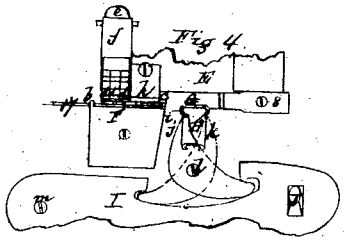


Fig. 1.

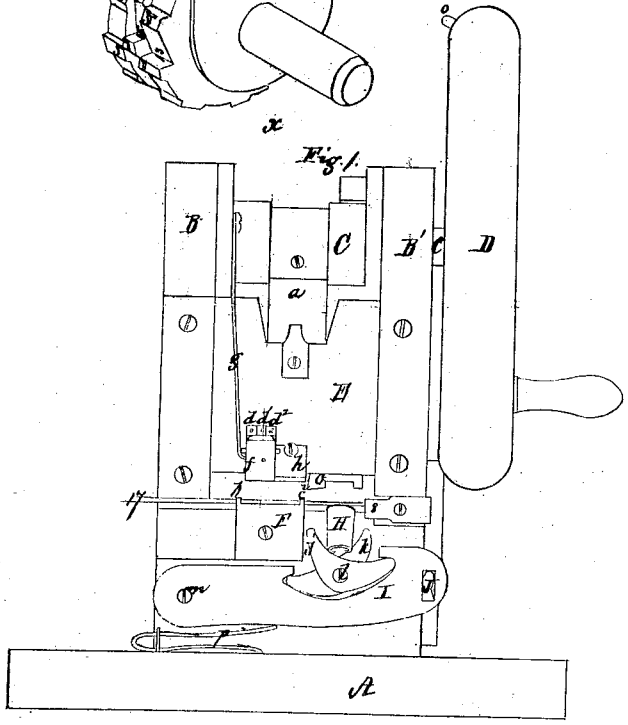


Fig. 2.

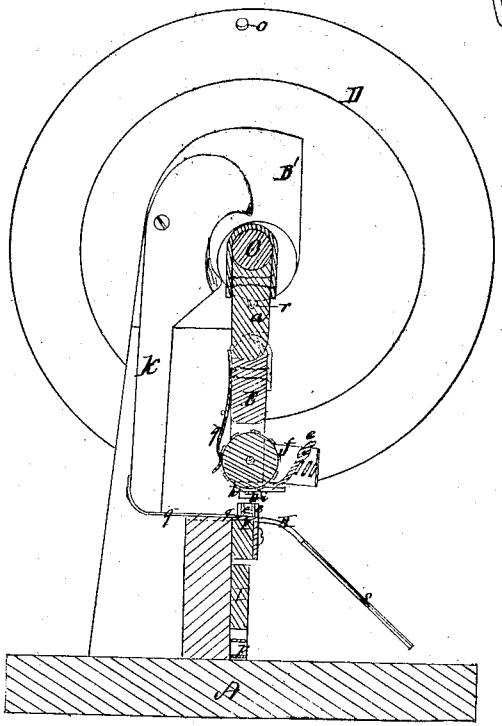
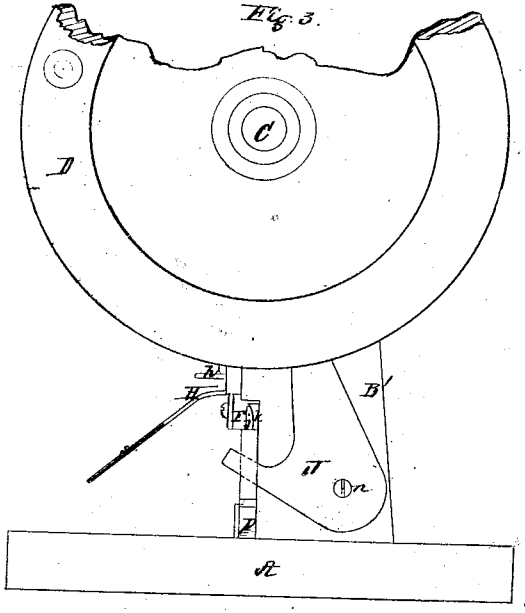


Fig. 3.



Witnesses,
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Charles H Dana

UNITED STATES PATENT OFFICE.

CHAS. H. DANA, OF WEST LEBANON, NEW HAMPSHIRE.

MACHINE FOR MAKING SHEEP-LABELS.

Specification forming part of Letters Patent No. **49,609**, dated August 29, 1865.

To all whom it may concern:

Be it known that I, CHARLES H. DANA, of West Lebanon, in the county of Grafton and State of New Hampshire, have invented a Machine for Making Metal Labels for Sheep, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a front elevation of my machine. Fig. 2 is a vertical section through the same on the line *x x* of Fig. 1. Fig. 3 is an end elevation of the same; Figs. 4, 5, 6, and 7, details to be referred to.

My invention consists in a new and useful machine for making metal labels or rings for the purpose of marking sheep, in which the strip of metal is numbered and lettered and the blank cut off and bent into the required shape to form the label, as will now be more fully set forth and described.

To enable others skilled in the art to understand and use my invention, I will proceed to describe the manner in which I have carried it out.

In the said drawings, A is the bed of the machine, from which rise two heavy standards, B B′, in suitable bearings in which runs the driving-shaft C, which carries at one end the fly-wheel D.

E is a sliding carriage, which is moved up and down in suitable ways in the standards B B′ by means of a crank on the driving-shaft, which is attached to the carriage by the connecting-rod *a*.

F is a bed or anvil, onto which is fed the strip of metal 17 from which the labels are to be formed, the strip being guided and held from moving laterally by passing through slots in projections *b c* rising from the bed F, and being fed forward until its end strikes against the gage 8, as seen in Fig. 1.

The manner in which the strip 17 is numbered and marked with the name of the owner will now be described.

d d′ d² are wheels which revolve on a short shaft, 1, having its bearings in the lower end of the carriage E. On their peripheries, which are of hardened steel, are raised the numbers 0 to 9, inclusive, and the wheels *d d′* are each provided with a notch, that in the wheel *d* being of the greatest depth. These wheels are revolved by means of a pawl, *e*, which is pivoted in a box, *f*, which is pivoted to the shaft on which the numbering-wheels revolve, and to this box *f* is attached one end of a rod, *g*, the opposite end of which is permanently attached to the standard B, and thus as the carriage E is moved up and down the box *f* is rocked, which causes the portion 12 of the pawl *e* to strike successively against the shoulders formed by the numbers on the wheel *d*, and revolve it as required. As soon as the wheel *d* has been turned an entire revolution the portion 12 of the pawl *e* falls into the notch 13 in the wheel *d*, which allows the portion 14 of the pawl *e* to strike against one of the shoulders formed by the numbers on the wheel *d′*, and on the next movement of the pawl both wheels are moved together, so as to bring the next number on the wheel *d′* into line. As the pawl is carried back it is raised out of the notch in the wheel *d*, which causes the portion 14 to clear the wheel *d′*, which is only moved at each complete revolution of the wheel *d* to bring its numbers successively into line. In a similar manner, as soon as the wheel *d′* has been turned an entire revolution the portion 14 of the pawl *e* falls into the notch 15 in said wheel, which allows the portion 16 of the pawl *e* to strike against one of the shoulders formed by the numbers on the wheel *d²*, and on the next movement of the pawl all three of the wheels *d d′ d²* are moved together. As the pawl is carried back it is raised out of the notches 13 and 15 in the wheels *d* and *d′*, so as to cause the portions 14 and 16 to clear the wheels *d′ d²*, and the operation continues as before, the wheel *d′* being moved to bring its successive numbers into line after each complete revolution of the wheel *d*, and the wheel *d²* being moved in a similar manner after each complete revolution of the wheel *d′*. These wheels are held from being revolved by their friction against each other by means of springs 9, Fig. 2, which drop into the spaces between the numbers and hold them until revolved by the pawl *e*, as required. The numbers 1 to 999 can thus be stamped on the labels by means of these wheels as they are brought down by the descent of the carriage E onto the metal strip 17 on the bed F. The required name is stamped on the strip by

means of the removable die *h*, which is secured to the carriage E.

G is a former, also attached to the carriage E, the lower edge, *i*, of which, in connection with the upper edge of the projection *c* of the bed F, forms a cutter for the purpose of detaching the blank from the strip 17, and the former G as it descends forces down the blank so cut off and bends it over a stationary former, H, which projects from the frame-work and is curved or bent down, as seen in Figs. 2 and 3. The ends of the blank are then caught and bent under the former H by the jaws or levers *j k*, which are pivoted at *l* to the frame-work, thus forming it into a finished label, Fig. 5. The lower ends of the levers *j k* fit into notches in a lever, I, pivoted at *m*, and the lever I is depressed to close the jaws of the levers *j k*, as seen in Fig. 4, by means of the lever J, Fig. 3, which is pivoted at *n* to the standard B′, and rocked by the pin *o* on the fly-wheel D as it revolves, a spring, *p*, serving to return the lever I to its original position after it has been depressed.

The finished label, Fig. 5, is thrown off the former H by means of a slide, *q*, which is actuated by a lever, K, which is pivoted to the standard B′, and vibrated at the required intervals by means of a pin, *r*, on the driving-shaft, (shown dotted in Fig. 2,) the slide *q* pushing the label forward until it slides by its own gravity down the inclined portion of the former H onto a stick, *s*, placed at its end, as seen in Figs. 2 and 3. The stick may be of a length to hold any required number, and when full may be replaced by another.

Operation: The parts being in the position represented in Fig. 1, a flat strip of metal, 17, (either plated with tin or galvanized to prevent corrosion,) is fed by hand or otherwise over the bed F until it strikes the gage 8. The carriage E now descends, causing the numbering-wheels and die *h* to be brought down simultaneously onto the strip 17 to stamp the number and name required. At the same time the cutter *i c* severs a portion of the strip of sufficient length to form a label, which is then forced down and bent over the stationary former H by the former G, when the ends are caught by the jaws of the levers *j k* and bent around the former H, as seen in Fig. 4, the first label made being without name or number. These levers *j k* are so arranged that the end 10 of the label will not be bent up so much as the end 11, which allows the label to be inserted in a hole in the sheep's ear and afterward closed up by a pair of pinchers or otherwise. The slide *q*, which rests on the stationary former H, is now moved forward by means of the lever K, as explained, which pushes the finished label onto the curved portion of the former H, when it slides down onto the stick *s*, placed at the extremity of the former to receive it, as before explained.

A person ordering a number of these labels may thus have them stamped with his name and numbered from 1 upward, and these, when placed in the ears of the sheep, form a ready and efficient means of identification. The numbers may be recorded, and the owner may thus keep an exact history of the age and pedigree of each sheep, with the weight and quality of the wool which it bears.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A machine for making labels for sheep, in which the several operations of numbering, lettering, cutting off, and bending the metal strip are performed by means of dies, cutters, formers, and jaws, constructed and operating substantially as described.

2. The wheels *d d′ d²*, in connection with the pawl *e*, for numbering the metal strip, constructed and operating substantially as described.

CHARLES H. DANA.

Witnesses:
JOHN TYLER,
GEORGE BLOOD.