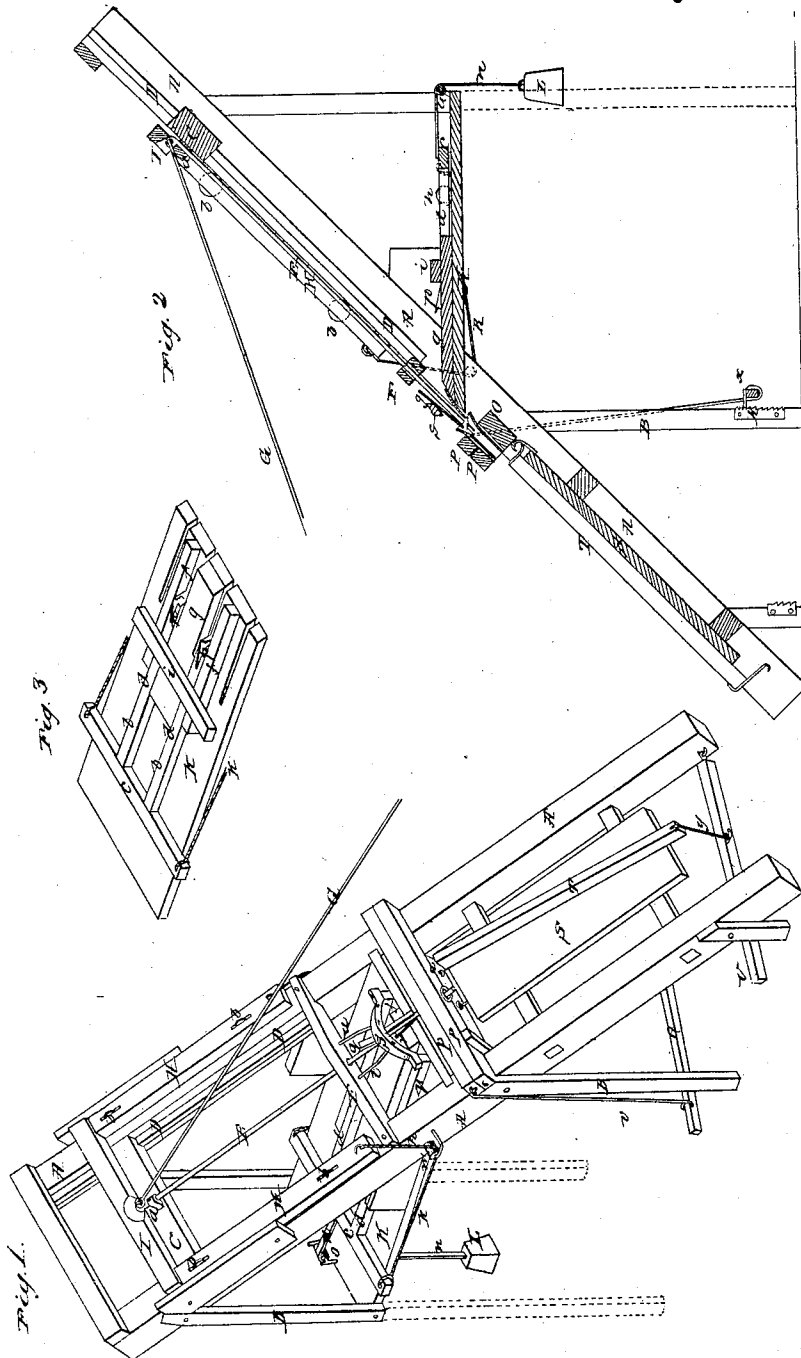


L. Plank,
Horse-Collar Machine.

N^o 20816.

Patented July 6, 1858.



UNITED STATES PATENT OFFICE.

LEVI PLONK, OF NEWTON, SOUTH CAROLINA.

MACHINE FOR STUFFING HORSE-COLLARS.

Specification of Letters Patent No. 20,816, dated July 6, 1858.

To all whom it may concern:

Be it known that I, LEVI PLONK, of Newton, in the county of Catawba and State of North Carolina, have invented certain new and useful Improvements in Machines for Stuffing Horse-Collars; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1, represents a perspective view of said machine. Fig. 2, represents a longitudinal vertical section through the same. Fig. 3, represents a detached view of the apparatus for conveying the straw to the stuffing rod.

To enable others skilled in the art to make and use my invention I will proceed to describe its construction and operation.

A, represents the frame of the machine which is supported by the legs B, which are of such a length as to place the frame in an inclined position of about 45°.

C represents a cross-head which is made to slide on the ways D, of the frame A; to this cross head the feed rod E, is secured by means of a small iron clamp a; the lower part of the feed rod passes through the cross brace F, which serves to guide it in its reciprocating motion.

G, is a connecting rod which passes through the eye on the upper end of the feed rod and by means of which, said feed rod is operated. H, represents two rails which at their upper ends are secured to the cross piece I, the rollers b, of the rails H, rest on the frame A, while the cross piece I, rests against the upper end of the feed rod E; the parts H, and I, thus form a frame or gate which rests on the inclined frame work of the machine, and which as the feed rod is moved up or down freely plays in the same direction.

K, represents a horizontal table which is secured to the frame work; on this table is arranged the straw conveying apparatus which is composed of the pieces c and d, which move freely over the table K, by means of the friction rollers h, and which are guided horizontally and vertically in their motion by means of the guide books f g, i.

k, l, represent two cords which are fastened to the lower ends of the rails H, and thence passing over the pulleys m, are fas-

tened to the ends of the cross piece c; a strap n, is secured to the center of the cross piece c, and passing over pulley o, and carries at its lower end a weight L. Thus it will be seen that as the feed rod E, is pushed upward, the rails H, move also upward and the straw feeders d, are drawn forward by the cords k, and when the feed rod E, is pulled down the weight L, causes the feeders to return and aid in drawing down the gate that carries the stuffing rod. The feeders d, are provided at their forward ends with metal projecting points p, which push the straw before them on the forward motion of the feeders, while their inclined upper edges permit them to pass under the straw when the feeders recede without deranging the same.

q and r, represent two flexible pieces of metal, which are fastened respectively, one to the curved brace S, and the other to the forward end of the piece g. By means of these elastic pieces and the guards t and u the straw is guided during its forward motion to the funnel N, into which it is forced by the feed rod E; the blade r, prevents the straw from falling from the front edge of table K, while the blade q, retains the straw when it is pushed forward by the feeders d. The funnel N, rests loosely on the cross piece O, and is held down by means of the hinged clamps P, which are pressed down by means of a treadle Q, which is suspended to rod v, the upper and hook shaped end of said rod hanging in a corresponding eye of the clamp P. The treadle Q, can be secured in any desired position by means of its plate x, falling in between the teeth of the ratchet plate R, as seen at Fig. 2.

S, represents an inclined board which rests on the frame of the machine and which serves to support the collar during the operation of stuffing.

T, is a lever which is hinged to the frame at z, and which can be pressed down upon the collar to hold it firmly during the stuffing operation; it is connected to the treadle U by means of a rod y, and said treadle can be secured to any desired position by an arrangement similar to that described in reference to the treadle G.

The operation of the machine is as follows: The clamps P, are raised and the funnel N, is inserted into the open end of the horse collar, and both are placed in their re-

spective recess or cross piece O; the clamps P, are then turned down and pressed down by means of treadle Q, thereby holding firmly the funnel, and the open end of the collar and the collar is placed upon board S, and secured thereto by clamp T. A suitable quantity of straw being placed upon the table K, the feed rod E is moved up and down by means of the rod G, and the straw is forced into the funnel N, and consequently into the collar while at the same time the conveyers *d*, carry a sufficient quantity of straw within the reach of the end of the feed rod to keep up a constant supply during the operation.

Having thus fully described the nature of

my invention, what I claim therein as new and desire to secure by Letters Patent is—

1. The straw conveyers *d*, in combination with the loose sliding frame H, I, for the purpose of carrying the straw to the feed rod substantially in the manner herein set forth.

2. I also claim the elastic blades *q*, *r* in combination with the guards *t*, *u* for the purpose of guiding the straw to the funnel substantially in the manner herein described.

LEVI PLONK.

Witnesses:

HENRY CLINE,
O. CAMPBELL.