No. 615,746. Patented Dec. 13, 1898.

S. H. RANDALL.

HORSE COLLAR STUFFER.

(Application filed Dec. 13, 1897.)

(No Model.)

FIG. 1.

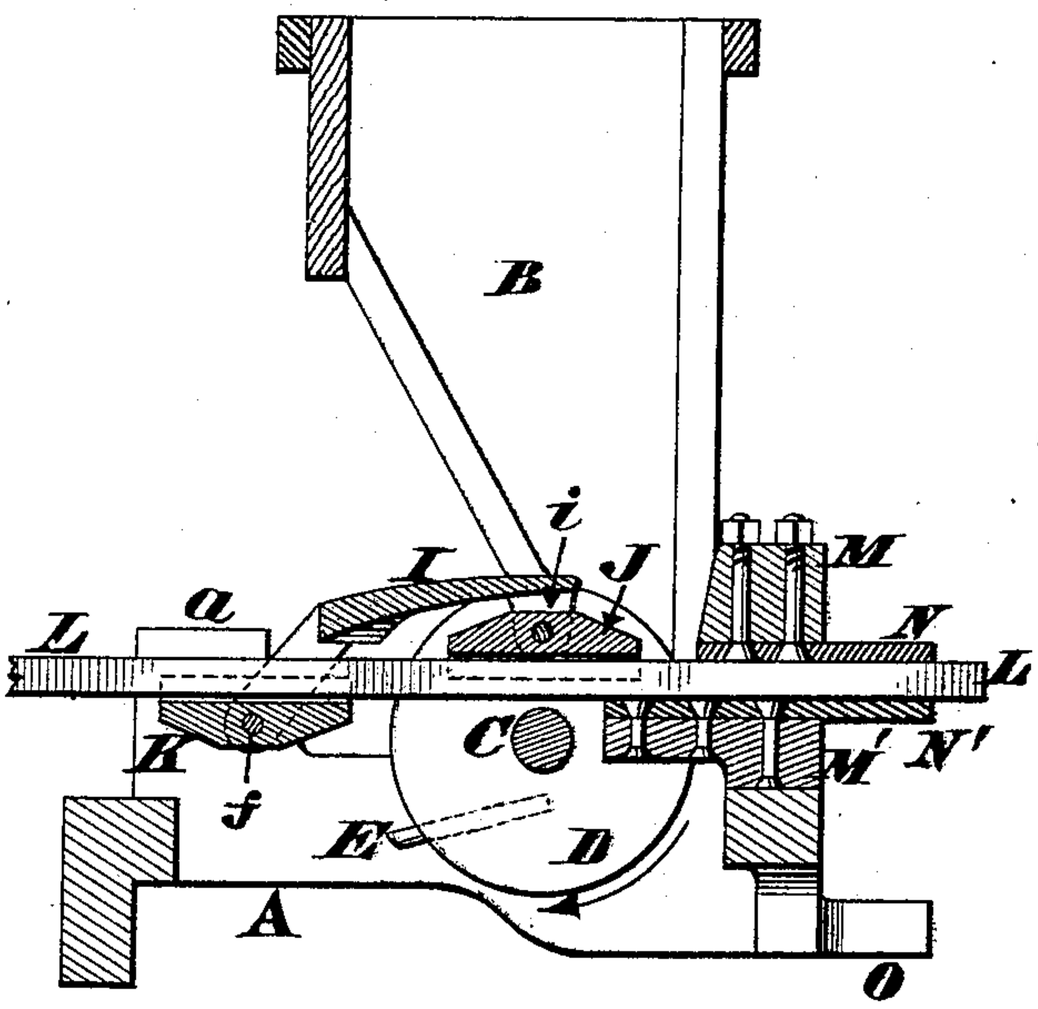


FIG. 2.

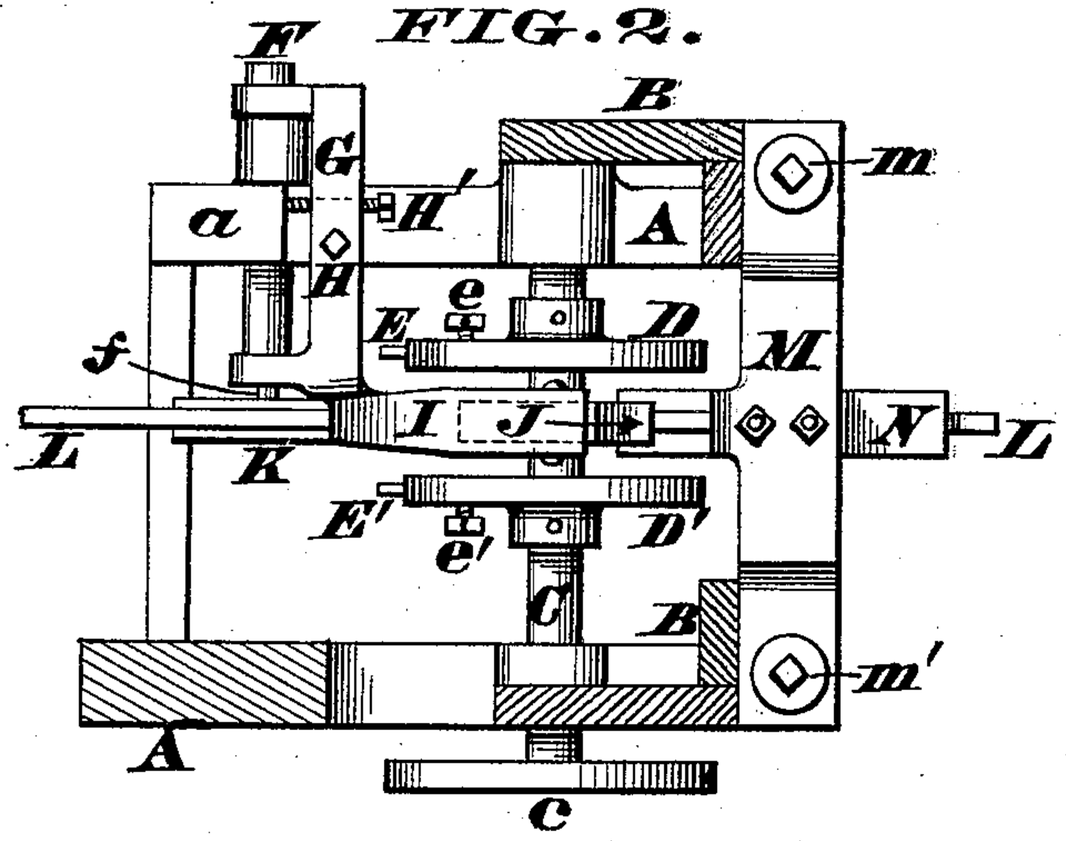


FIG. 3.

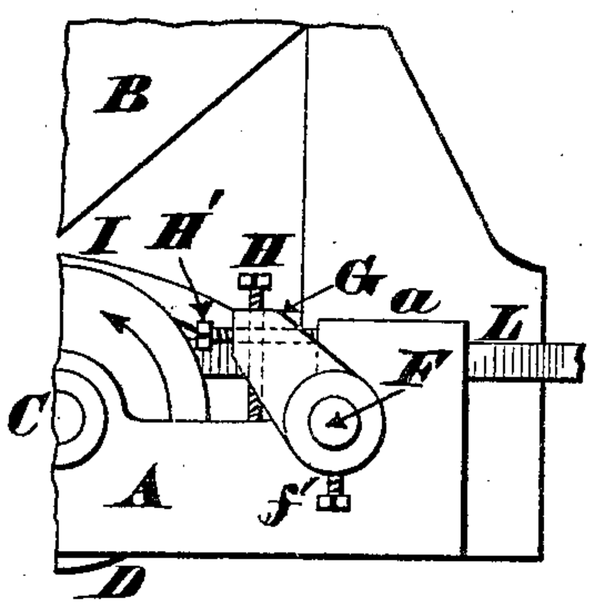


FIG. 4.

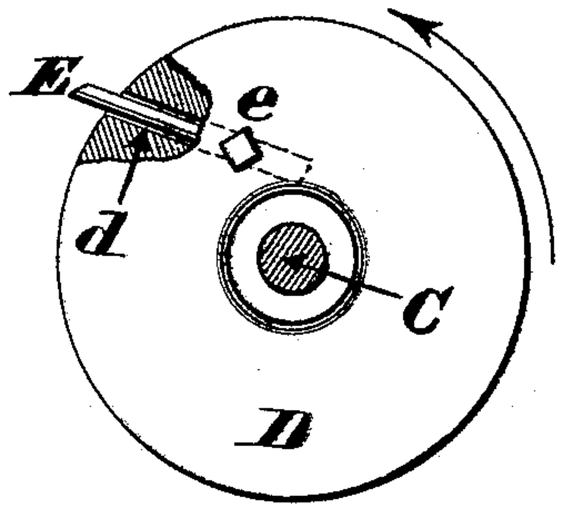


FIG. 5.

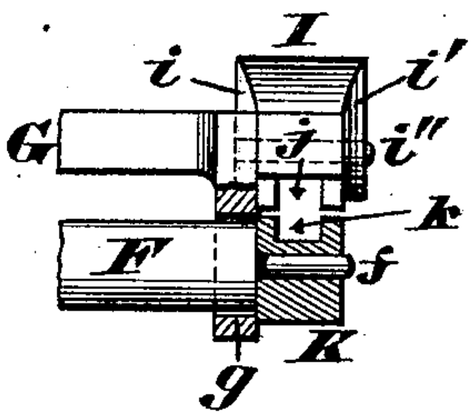
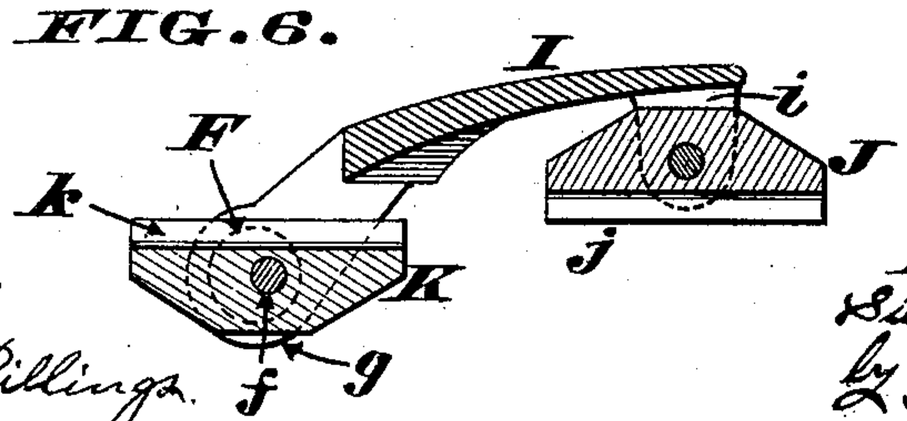


FIG. 6.



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HORSE-COLLAR STUFFER.

SPECIFICATION forming part of Letters Patent No. 615,746, dated December 13, 1898.

Application filed December 13, 1897. Serial No. 661,611. (No model.)

To all whom it may concern:

Be it known that I, SILAS H. RANDALL, a citizen of the United States, residing at Wyoming, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Horse-Collar Stuffers; and I do hereby declare the following to be a full, clear, and exact description of the invention, reference being had to the annexed drawings, which form a part of this specification.

My invention comprises certain special improvements in those machines used for stuffing cut straw or other similar filling into the rims of horse-collars, the details of said improvements being hereinafter more fully described and then pointed out in the claims.

In the annexed drawings, Figure 1 is a vertical section through the hopper of a horse-collar stuffer embodying the aforesaid improvements. Fig. 2 is a horizontal section of said hopper. Fig. 3 is a side elevation of part of said hopper and some of its attachments. Fig. 4 is a sectionized side elevation of one of a pair of feed-disks at the bottom of the hopper. Fig. 5 is a sectionized end elevation of an arm that carries a pair of adjustable guides. Fig. 6 is a vertical section taken longitudinally through said arm and guides.

A represents a frame upon which is secured a hopper B, and C is a shaft journaled transversely of said frame and just below said hopper, a pair of feed-disks D D′ being fastened to said shaft and the disks being armed with projecting pins E E′. These pins are inserted in tangential bores of the disks, as shown at *d* in Fig. 4, and are retained in place by bolts *e e′*. Fastened to one end of shaft C is a wheel *c*, to which power is so transmitted as to rotate the disks D D′ in the direction of the arrow shown in Fig. 1. Again, the frame A has arranged transversely of it a rock-shaft F, having at one end an eccentric stud *f*. Rigidly secured to the opposite end of this shaft by a screw *f′* (seen only in Fig. 3) is a bar G, having at its inner end a bearing *g* for said shaft to turn in. (See Fig. 5.)

H is a screw tapped vertically in said bar and having its point in contact with the top of frame A, and H′ is another screw passing horizontally through said bar and bearing against an upward projection *a* of said frame.

Projecting rigidly from the inner end of bar G is an arm I, having in front a pair of ears *i i′*, provided with a pivot *i″*, upon which is hung a swinging guide J, the latter being grooved longitudinally at *j*. (See Figs. 5 and 6.) K is another similar guide grooved at *k* and hung upon the eccentric stud *f* of shaft F, the object of these guides being to confine to a proper path the front or effective end of a reciprocating stuffing-rod L, which rod is driven in the usual manner by a pitman connection with a crank.

m m′ are bolts wherewith are secured to the frame A two horizontal cross-bars M M′, the upper one of which, M, has secured to it a fixed guide N, while the lower bar M′ has fastened to it a similar fixed guide N′. These bars and guides are situated in front of the hopper, and the object of the devices N N′ is to guide the stuffing-rod L in a straight path as it forces cut straw into a collar fastened to a slide or carriage of the machine in the customary manner.

O is a lug to which is attached one end of a pair of tracks upon which the carriage travels.

In constructing my collar-stuffer the operative parts of the machine must be so arranged as to bring the effective or front end of stuffing-rod L about above the shaft C when said rod is fully retracted or drawn away from the fixed guides N N′; but the rod should never be pulled out of the other guides J K. The proper adjustment of these devices J K for guiding the effective end of the rod into the fixed guides N N′ is accurately effected by first turning the rock-shaft F either to the right or left to set the rear guide K and then raising or lowering the arm I to determine the exact position of the front guide J, after which act the screws *f′* H H′ are so tightened as to preserve these devices in position. Finally, by properly adjusting the pins E E′ a greater or less quantity of filling will be drawn down from the hopper at every rotation of the feed-disks D D′ and be left directly in the path of the rod L to be driven by its advance through the passage between the guides N N′ and thence into a collar.

I claim as my invention—

1. In a horse-collar stuffer, the hopper B having a pair of fixed guides N N′; a pair of guides

J, K, in line with said fixed guides; devices for adjusting said guides, J, K, and a stuffing-rod L, reciprocating in said devices J, K, N, N', for the purpose stated.

2. In a horse-collar stuffer provided with a reciprocating stuffing-rod L, and fixed guides N N'; the rock-shaft F, having an eccentric *f;* the guide K hung upon said eccentric, and grooved longitudinally at *k;* the arm G I, carried by said shaft F, and, pivoted to the free end of said arm G I, another guide J, grooved longitudinally at *j*, all as herein described, and for the purpose stated.

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

SILAS H. RANDALL.

Witnesses:
JAMES H. LAYMAN,
JOHN C. ROGERS.