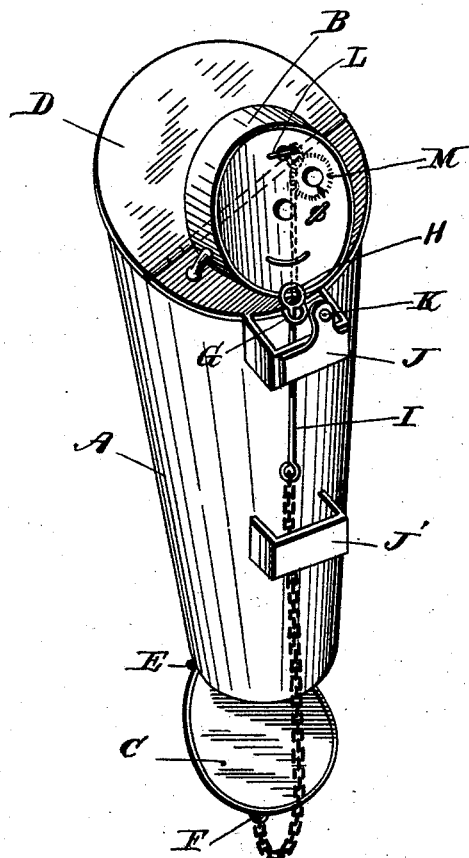


(No Model.)

F. P. BOLAND.  
AUTOMATIC STOCK FEEDER.

No. 455,504.

Patented July 7, 1891.



WITNESSES:

Oliver S. Cressy,  
George L. Rockwell

INVENTOR:

Frank P. Boland  
per D. M. Small, his atty.

# UNITED STATES PATENT OFFICE.

FRANK P. BOLAND, OF PROVIDENCE, RHODE ISLAND.

## AUTOMATIC STOCK-FEEDER.

SPECIFICATION forming part of Letters Patent No. 455,504, dated July 7, 1891.

Application filed March 19, 1891. Serial No. 385,572. (No model.)

*To all whom it may concern:*

Be it known that I, FRANK P. BOLAND, of the city and county of Providence, in the State of Rhode Island, have invented an Improved Horse-Feeder, my object being to combine simplicity of construction with durability, cheapness, and convenience, of which the following is a specification.

The accompanying drawing, which forms a part of this specification, is a perspective view of my invention, showing all its parts.

It consists of a receptacle A for the grain, &c., having a cover D, a trap C, hinged at E, a chain or cord I, secured to trap with ring or device H for conveniently connecting it with winding attachment or key L of the alarm on clock B.

G is an eyelet through which the wire or cord I passes, and which serves to catch and thus prevent the ring H from dropping too far when released from key L as it turns at the time set on the alarm-dial M.

J J' are guards which hold the receptacle out from the wall as it hangs on nail or hook passing through hole K, so as not to interfere with the working of the chain I or the trap C. The latter is kept closed by securing chain to key L, slipping the ring H onto the right-hand end of this key when in a horizontal position, and it opens by dropping as soon as

this key turns enough to permit the ring to slip off.

The receptacle A is preferably constructed of metal and cone-shaped, so that all the contents will freely run out when trap is open, though I do not confine myself to any particular material or to any particular shape or construction of individual parts.

It is obvious that my device could be used for water as well as for grain, the only modification required being in the valve C, which in this case should be made much smaller and fit water-tight.

I am aware that a clock attachment has heretofore been used on or in connection with automatic horse-feeders, and therefore I do not broadly claim such a combination without qualification; but

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

An automatic horse-feeder having a receptacle A, alarm-clock B secured to top thereof, key or lever L, cover D, trap C, device I with ring H thereon, loop G, and guards J J', all arranged, combined, and operating substantially as set forth.

FRANK P. BOLAND.

Witnesses:

DEXTER M. DUVALL,  
GEORGE L. ROCKWELL.