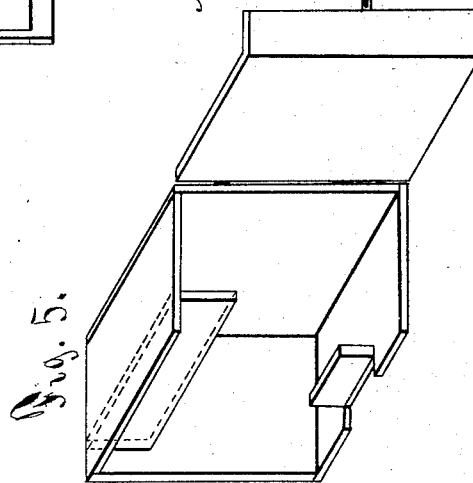
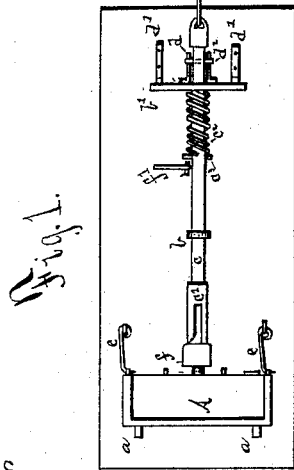
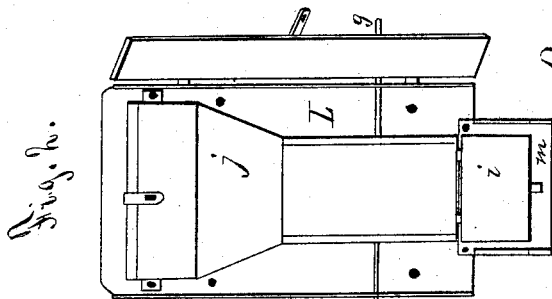
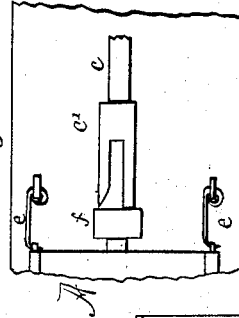
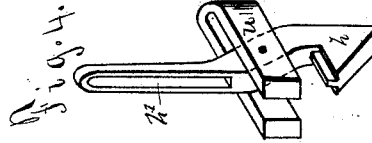
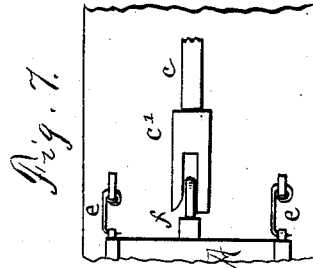
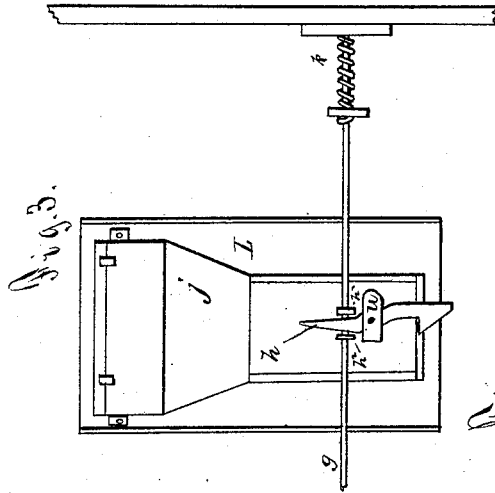


(No Model.)

T. L. BISSELL.
TIME STOCK FEEDER.

No. 327,062.

Patented Sept. 29, 1885.



Witnesses.
J. Chasleton Ingram.
Sid H. Nealy.

Inventor.
T. L. Bissell

UNITED STATES PATENT OFFICE.

TITUS LUCRETIVS BISSELL, OF CHARLESTON, SOUTH CAROLINA.

TIME STOCK-FEEDER.

SPECIFICATION forming part of Letters Patent No. 327,062, dated September 29, 1885.

Application filed December 12, 1884. (No model.)

To all whom it may concern:

Be it known that I, TITUS LUCRETIVS BISSELL, a citizen of the United States, residing at Charleston, in the county of Charleston and State of South Carolina, have invented certain new and useful Improvements in Automatic Time Stock-Feeders; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention has relation to automatic time stock-feeders; and it consists of a machine which increases the power of the alarm-clock to such a degree and in such a direction that it will set off, by means of a connecting-wire, any number of boxes at the same time, and any number of feed-boxes arranged so as to be operated by said machine, thus saving the trouble of winding more than one clock for more than one feed-box.

In the accompanying drawings, Figure 1 is a face view of my machine for operating feed-boxes. Fig. 2 is a front view of the feed-box *j*, hung up in the casing *L*. Fig. 3 is a rear view of the feed box *j*, showing the trigger *h*, wire *g*, and nuts *h*², and spiral spring *k*, in which figure the back of the casing is removed. Fig. 4 is a perspective view of the trigger *h*, showing the slot *h*¹. Fig. 5 is a perspective view of the clock-case, showing partitions which hold the clock in position. Fig. 6 is a detail view showing the end of the winder *f* pressed against the end of the clutch *c*, which is borne on the end of the rod *c*. Fig. 7 is a detail view showing the winder *f* when it has turned around and dropped into the slot of the clutch *c*, thus allowing the said clutch *c* to fly back and operate the rod *c* and the wire *g*.

Fig. 1 represents a board on which is attached a clock-case containing an alarm-clock, *A*, and brackets *b* and *b*¹. This case *A* is fastened on the board by hinges *a a*. *b b*¹ are brackets through which the rod *c* oscillates. To one end of this rod is attached a clutch, *c*. Between the two brackets *b b*¹ is a spiral spring, *c*², pressing against the bracket *b*¹ and tensioned by the pin *c*³. Attached to the outside of the bracket *b*¹ are two runners, *d*, on which the pin *d*² runs and keeps the rod *c*

from revolving. *F* is a lever, which operates against the pin *c*³ to push the rod *c* back when wishing to set the machine.

When the box which contains the clock-case *A* is in an upright position and held so by the hooks *e e*, the winder *f* of the clock is pressed against the clutch *c*, keeping the spiral spring *c*² pressed close. When the alarm goes off, the winder *f* revolves until it turns into the clutch *c*, at which time the spring *c*² throws the rod toward the clock with a jerk, the clutch being prevented from butting against the clock by the pin *d*² coming into contact with the rear face of the bracket *d*¹. By this action the wire *g* jerks the trigger *h* and drops the bottom *i* of the feed-box *j*.

The wire *g* passes through the groove *h*¹ of the trigger *h*, having a nut, *h*², on each side of said trigger. The trigger *h* works in the U-shaped bearing *u*.

Attached to the opposite end of the wire *g* is light spiral spring *k*. This spring *k* is fastened to the opposite end of the stable and keeps the wire taut.

The feed-boxes are hung up in the casings *L*, which are screwed to the side of the stable. These casings are to protect the feed-boxes from being injured by the animals. To the bottom of these casings *L* are chutes *m*, into which the food falls and is led into the food-trough below. This arrangement is placed above and behind the feed-trough.

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

1. The combination of the key *f*, working on the alarm-shaft of the clock *A*, rod *c*, having clutch *c*, oscillating through brackets *b* and *b*¹, spiral spring *c*², runners *d d*, and pin *d*², all substantially as shown and described.
2. In combination with the oscillating rod *c*, wire *g*, passing through the slot *h*¹, of trigger *h*, having nuts *h*^{2 h}², spiral spring *k*, all substantially as shown and described.
3. The combination of the alarm-clock *A*, oscillating rod *c*, spiral spring *c*², wire *g*, nuts *h*^{2 h}², and trigger *h*, working in bearing *u*, all substantially as shown and described.

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

TITUS LUCRETIVS BISSELL.

Witnesses:

SID H. NEALY,
JNO. C. INGRAM,