(No Model.)

W. P. KELLOGG.

AUTOMATIC STOCK FEEDER.

No. 482,366. Patented Sept. 13, 1892.

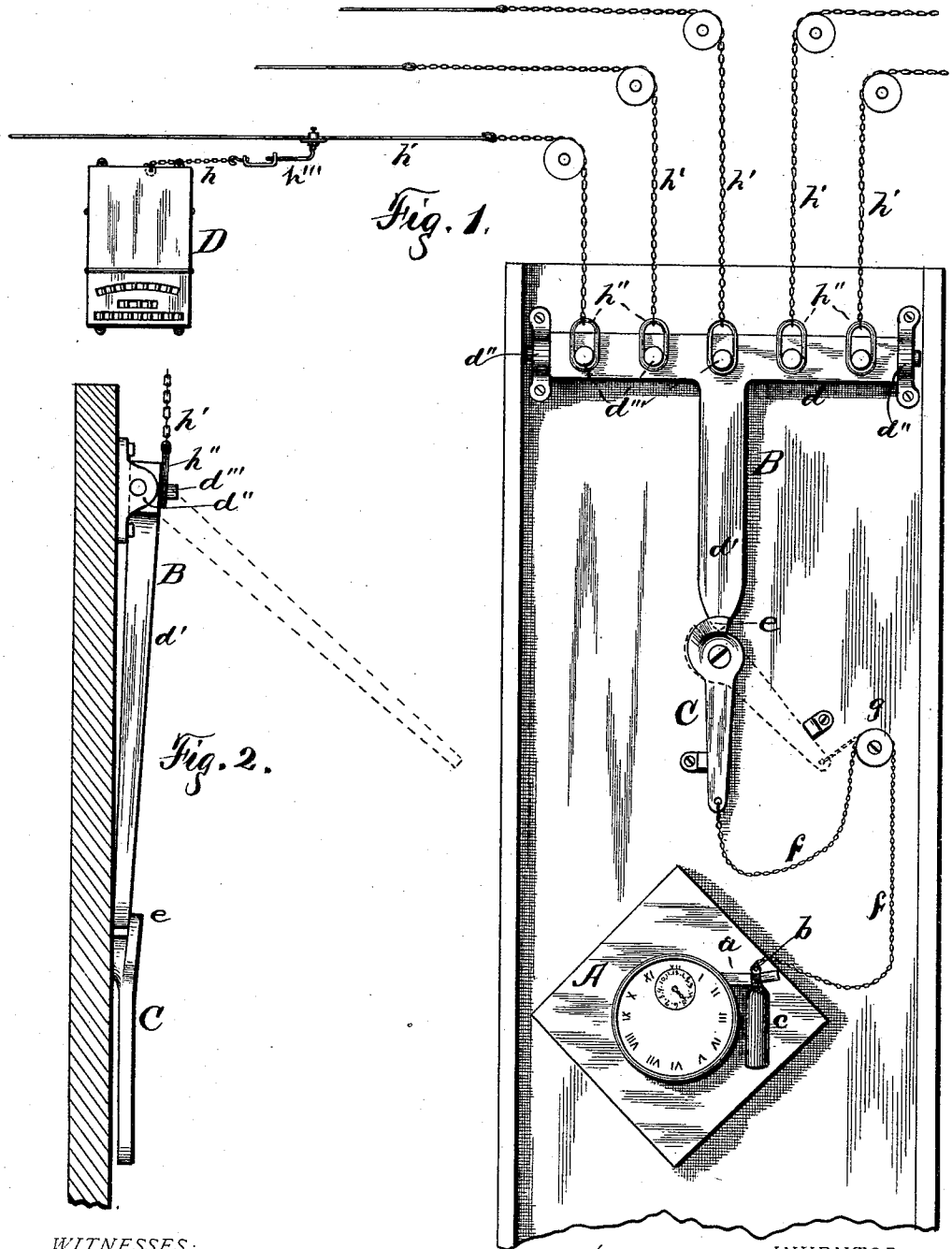

Fig. 1.

Fig. 2.

WITNESSES:

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WALTER P. KELLOGG, OF SYRACUSE, NEW YORK.

AUTOMATIC STOCK-FEEDER.

SPECIFICATION forming part of Letters Patent No. 482,366, dated September 13, 1892.

Application filed May 23, 1892. Serial No. 433,938. (No model.)

To all whom it may concern:

Be it known that I, WALTER P. KELLOGG, of Syracuse, in the county of Onondaga, in the State of New York, have invented new and useful Improvements in Releases, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

My invention relates to devices for automatically releasing a cord, wire, or other connection at a predetermined time, by which hoppers may be opened and deposit their contents in feed boxes or mangers simultaneously, or a draft may be opened or closed, or may be attached to any other device which itself operates by gravity, said device being operated by a trip mechanism connected to and actuated by an alarm or other clock.

My object is to produce such a trip mechanism which may be connected to the device sought to be operated and is itself operated by a single clock having a direct connection to a single trip common to all, which is tripped or released by the clock mechanism, whereby all of the hoppers in case it is applied to feed-boxes are opened simultaneously.

My invention consists in the several novel features of construction and operation hereafter contained and which are specifically described in the claim hereto annexed.

It is constructed as follows, reference being had to the accompanying drawings, in which—

Figure 1 is a plan view or front elevation of my apparatus. Fig. 2 is a side elevation of the trip mechanism, showing the swing of the lever by the dotted lines.

This apparatus is applicable to many uses—for opening furnace-dampers, turning on or off water or gas, or for other analogous purposes; but I will herein only describe its use for feeding horses or other animals.

A is the clock, of any desired style, and *a* is the locking-bar, adapted to engage with the alarm tripping-lever, and *b* is a tripper normally held upon an inclined trackway by said locking-bar, all as shown, described, and claimed in the patent issued to me November 18, 1889, No. 415,389, which is here referred to as illustrating a convenient form or style of tripping mechanism for releasing the weight *c*.

B is the hopper-tripping lever, shown here as of T form, comprising a head *d* and a lever or handle *d'*, said head being provided with end gudgeons journaled in bearings *d''*, as shown, and further provided upon its outer face with studs or pins *d'''*, projecting from its outer face.

C is a catch pivotally mounted and provided with a flange *e* upon its upper end, adapted to overlap the lower end of the lever-arm *d'*, as shown, and having its lower arm connected by a chain *f*, passing over the pulley *g* to the weight *c*.

D is a feed-hopper provided with a drop-bottom. normally supported by the chain *h*, which is connected to the main chain *h'*, passing over a pulley, as shown, and provided with a ring *h''* upon its end, which normally is hooked over a stud *d'''*.

At *h'''* I show a detachable means for connecting the rod or chain to the flexible connection which operates the feed-box, also providing it with a take-up, so that the whole may be readily detached.

It will be observed that the rod passes through the eye in the top of the piece, and *x* is a binding-screw which secures it upon the rod at any desired point, and at its opposite end is a swivel having its inner connection provided with a screw and thread by which the take-up is effected.

I show other chains leading to and connected to other feed-hoppers, passing over a proper system of pulleys and each provided with an end ring, all concentrated by hooking the rings over the studs upon the single hopper-tripping lever, so that it is evident that when these rings are simultaneously released from said studs all of the hoppers will be opened simultaneously. Then when the weight *c* is released by the clock mechanism it jerks the catch loose from the hopper-tripping lever, whereupon the head thereof will rotate until the rings are all released from the studs, such rotation being caused by the connection or bearing of said rings being off from the center line of the head, assisted by the weight of the feed in the hoppers and also by the weights upon said chains.

It is evident that as many hoppers may be thus connected to the hopper-tripping lever as may be desired and that all of them can

be controlled and released by a single clock and weight.

The form of the catch may be varied as desired so long as one arm is connected to the weight and the other is adapted to engage with the arm of the hopper-tripping lever.

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

The combination, with the T-lever provided with studs and journaled in bearings at the ends of its head, of a catch engaging the lower arm thereof and the weight connected to said catch and tripped by a clock mechanism to release the chains detachably connected to the head of said lever, as set forth.

In witness whereof I have hereunto set my hand this 21st day of May, 1892.

WALTER P. KELLOGG.

In presence of—
H. P. DENISON,
C. W. SMITH.