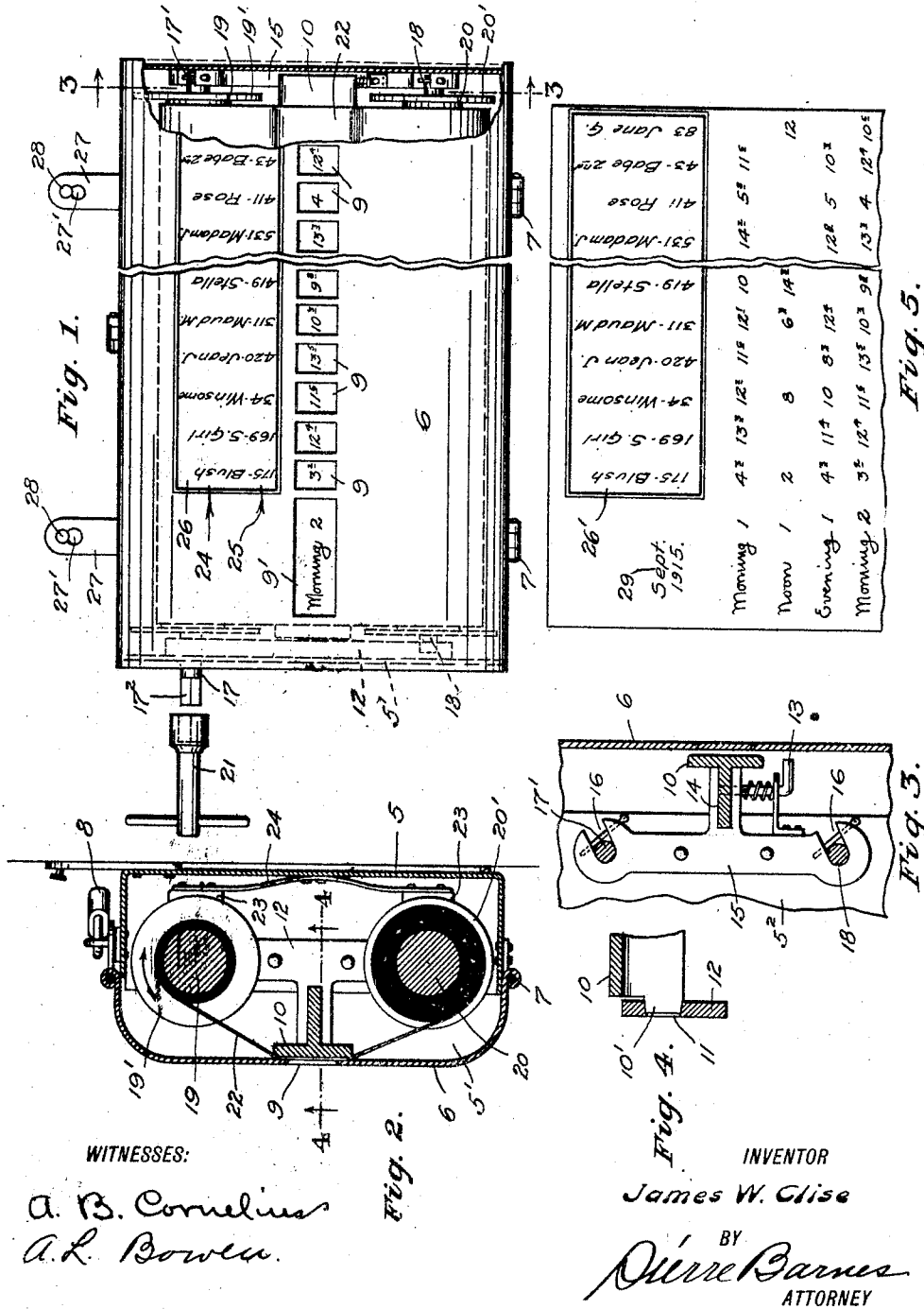


J. W. CLISE.
RECORDING APPARATUS.
APPLICATION FILED SEPT. 25, 1915.

1,230,997.

Patented June 26, 1917.



UNITED STATES PATENT OFFICE.

JAMES W. CLISE, OF SEATTLE, WASHINGTON.

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Specification of Letters Patent. Patented June 26, 1917.

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To all whom it may concern:

Be it known that I, JAMES W. CLISE, a citizen of the United States, residing at Seattle, in the county of King and State of Washington, have invented certain new and useful Improvements in Recording Apparatus, of which the following is a specification.

This invention relates to devices for use in dairies for keeping a record of the milk obtained in the successive milkings from each cow.

The object of the invention is the provision of simple and inexpensive apparatus of this character to indicate to the owner or manager the regularity of flow and the quantity of milk produced by a cow, and wherefrom the condition of an animal may be ascertained and afford other information useful in the proper conduct of a dairy.

With these ends in view, the invention consists in the novel construction, adaptation and combination of devices, as will be hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a front elevational view of apparatus embodying my invention. Fig. 2 is a transverse vertical section of the same. Fig. 3 is a detail section taken substantially through 3—3 of Fig. 1. Fig. 4 is a similar view through 4—4 of Fig. 2. Fig. 5 is a fragmentary view of a sample record as produced in accordance with the present invention.

Referring to the drawings, the numeral 5 designates a casing having its front 6 connected thereto, as by hinges 7, and may be secured in closed position by a padlock 8. Intermediate its height the casing front 6 is provided with a horizontally arranged row of sight apertures 9 and 9¹.

Within the casing and extending across said apertures is a bar 10 which is detachably connected to the casing by having at one end a projection 10¹ to engage in a socket 11 (Fig. 4) provided in a laterally extending projection of a bracket 12 secured to an end 5¹ of the casing and having a spring-pressed bolt 13 (Fig. 3) engage the bar at its other end to fasten the same in a recess 14 provided in a laterally extending projection of a bracket 15 which is secured to the other end 5² of the casing. Said fixtures are provided with holes or slots such as 16 to serve as bearings for gudgeons 17, 17¹ and 18 which extend axially from the

ends of rollers 19 and 20 disposed respectively above and below the bar 10.

The gudgeon indicated by 17 protrudes through the casing end 5¹ and has a polygonal outer end 17² adapted to be engaged by a key 21 when the associated roller 19 is to be rotated. The other gudgeons 17¹ and 18 preferably terminate within the casing.

A record sheet 22 of paper or other suitable material is coiled about the roller 20 before the latter is inserted in the casing. The free end of such sheet is then passed through the interstice between the casing front 6 and the bar 10 and thence to and about the other roller 19.

23 indicate brake blocks which are yieldingly held against flanges 19¹ and 20¹, preferably, of the respective rollers by means of a spring 24 to prevent any looseness in the sheet as it is advanced in the operation of the device.

Upon the front 6 and desirably above the respective apertures 9 thereof is a row 24, Fig. 1, of the names of the different cows whose milkings are to be chronicled in the subadjacent apertures or, in lieu of such names, the cows may be denoted by suitable characters such as shown by the numerals in the row 25 of Fig. 1.

These designating names or characters for the animals are most conveniently employed by printing the same upon a sheet 26 of paper which is pasted or otherwise attached to the casing front. The casing, when in use, is advantageously secured to the wall of a building in any suitable manner, as by ears 27 provided on the casing and having slots 27¹ for the reception of supporting nails 28.

The operation of the invention is as follows:

The paper sheet 22 being applied to the rollers and extending in front of the bar 10, is marked by writing in the space at 9¹ the time of day as, for instance, "Morning" when the milkings which are to be recorded were made, and in close relation thereto in this space the day of the month, as indicated by "2." Then in the opening 9² appropriated for each cow is marked or written by the milker or weigher on the paper resting on bar 10, the quantity of milk which the cow has delivered at the time as, for example, for the animal designated by "Blush" in Fig. 1, "32" indicating three and two-tenths pounds; for "S. Girl," "12" in-

dicating twelve and four-tenths pounds, and so on for the others.

After the productions from a milking have thus been recorded the sheet of paper is advanced to present an unmarked portion below the row of casing apertures 9-9¹ and which is accomplished by rotating through the agency of the key 21 the roller 19 to wind upon the latter the sheet which is withdrawn from the roller 20. This new portion of the sheet is then designated in the space 9¹ the time and date, as "Noon", "2", and under each animal is marked her delivery of milk, and so on, for the successive occasions.

When a sheet has been marked to cover a predetermined time, as a month, the sheet is replaced by another sheet and is marked as at 29, Fig. 5, to indicate the period, and has marked or, most conveniently, pasted upon the top of the sheet a list 26¹ of cows arranged and spaced to correspond with their positions as utilized on the casing front and in columnar relations with the vertical rows of numbers assigned to the respective cows.

By having a gudgeon of but one of the rollers protrude from the casing, the other roller cannot be rotated from the outside of the casing and, in consequence, when a sheet has been advanced it prevents an employee turning back the sheet for the purpose of inspecting the records of previous milkings, should he desire to cheat or cover up any carelessness on his part by making an entry determined from an inspection of or comparison with the preceding records.

What I claim, is—

1. A cow-record apparatus including a casing having a cover provided with apertures, a pair of rollers within said casing, brackets secured in and to opposite sides of said casing and provided with spaced bearing portions in which said rollers are detachably journaled, each of said brackets

being further provided with a single writing platen supporting projection intermediate the bearing portions thereof, and a relatively narrow writing platen having its ends detachably connected to said platen supporting projections and arranged longitudinally of the casing adjacent the apertures of the cover.

2. A cow-record apparatus including a casing having a cover provided with apertures, a pair of rollers within said casing, brackets secured in and to opposite sides of said casing and provided with spaced bearing portions in which said rollers are detachably journaled, each of said brackets being further provided with a single writing platen supporting projection intermediate the bearing portions thereof, a relatively narrow writing platen having one end detachably inserted in and supported by one of said platen supporting projections, and a latch for detachably connecting the other end of said platen to the other of said platen supporting projections.

3. A cow-record apparatus including a casing composed of two substantially half-sections hinged together, a pair of rollers within said casing provided with gudgeons at each end thereof, brackets secured to opposite sides of one section of said casing and provided with spaced bearing portions having means for detachably receiving said gudgeons, said brackets being further provided with writing platen supports intermediate said bearing portions which extend into the other section of the casing when closed, and a writing platen detachably received by said writing platen supports.

Signed at Seattle, Washington, this 15th day of September, 1915.

JAMES W. CLISE.

Witnesses:

PIERRE BARNES,
E. PETERSON.