

No. 682,721.

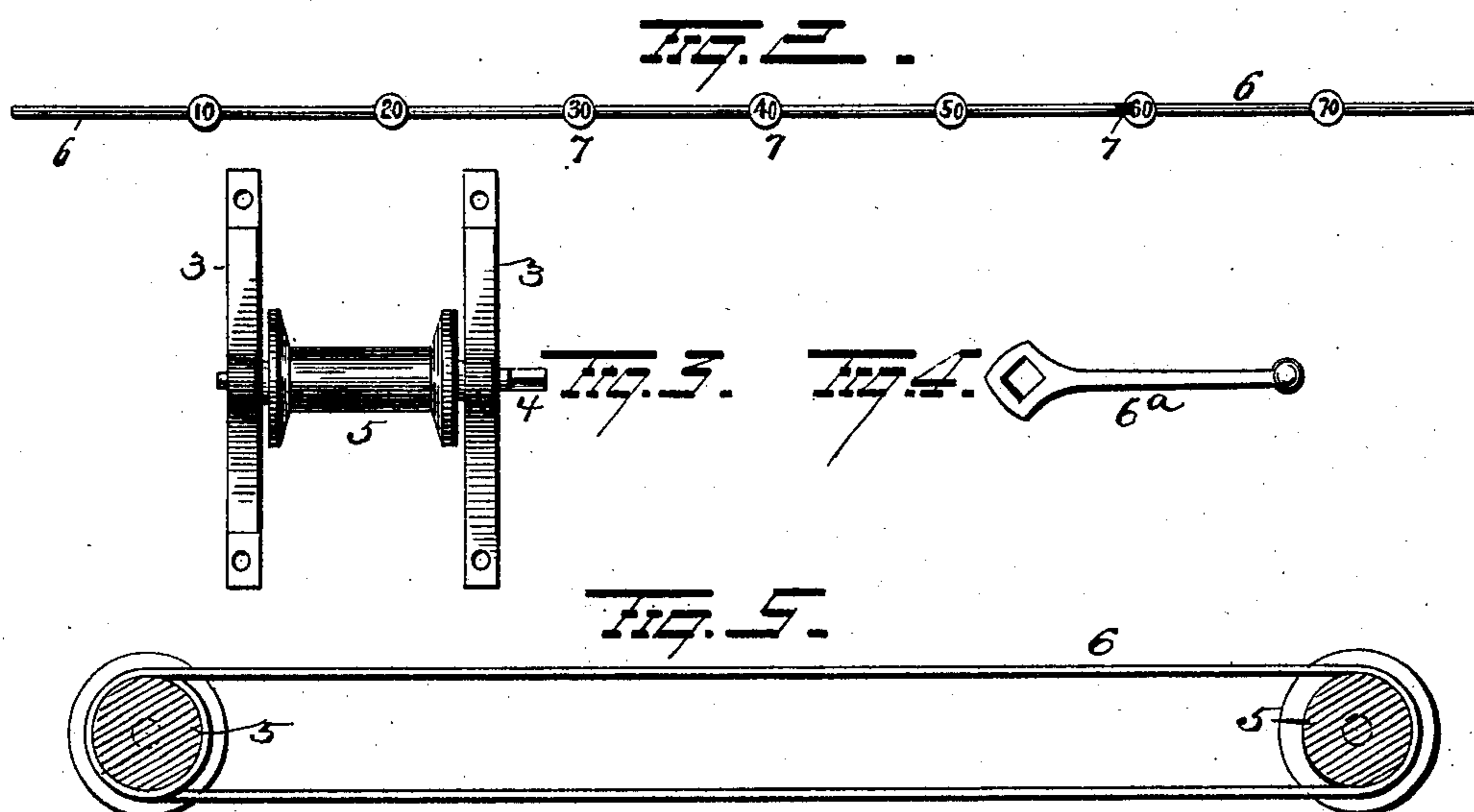
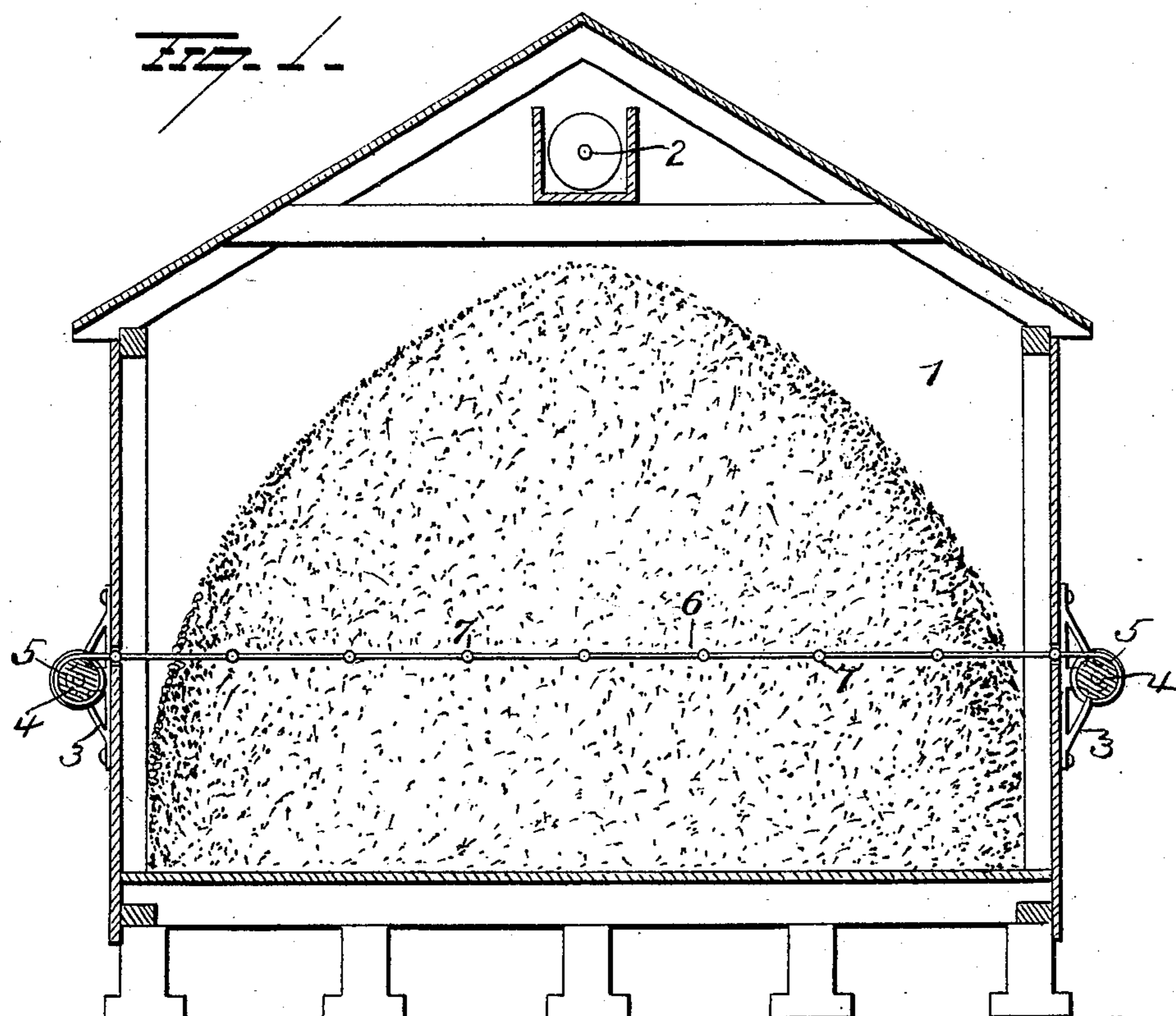
Patented Sept. 17, 1901.

G. LEDER.

TEMPERATURE FINDER FOR STORED COTTON SEED, &c.

(Application filed Feb. 12, 1901.)

(No Model.)



WITNESSES

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GEORGE LEDER, OF DEMOPOLIS, ALABAMA.

TEMPERATURE-FINDER FOR STORED COTTON-SEED, &c.

SPECIFICATION forming part of Letters Patent No. 682,721, dated September 17, 1901.

Application filed February 12, 1901. Serial No. 47,069. (No model.)

To all whom it may concern:

Be it known that I, GEORGE LEDER, of Demopolis, in the county of Marengo and State of Alabama, have invented certain new and useful Improvements in Temperature-Finders for Stored Cotton-Seed, &c.; and I do hereby 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.

My invention relates to an improved temperature-finder for stored cotton-seed, cotton-seed hulls, and the like, the object of the invention being to provide a device of this character which will permit the ready ascertaining of the temperature of a quantity of stored cotton-seed or seed-cotton to prevent the loss of the same by the generated heat.

Heretofore it has been the custom from time to time to send a laborer into the storehouse and force a bar into the pile, letting it remain long enough to acquire a temperature equal to that of the pile, and it is then withdrawn to ascertain its temperature, and if it is warm it indicates that the seed are becoming heated and must be used at once or exposed to the air to cool them; otherwise the whole pile will spoil and be seriously damaged. With this method it was necessary to intrust this service to the laborer of the least intelligence, as it is an extremely difficult and disagreeable task to climb on top of a pile of cotton-seed or seed-cotton, and to avoid this difficulty and to place the examination of temperature of the pile in the care of the foreman or other intelligent and expert workman my invention was devised; and it consists of certain novel features of construction and combinations and arrangements of parts, as will be more fully hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in section, illustrating my improvement in position in a bin or storehouse. Fig. 2 is an enlarged view of the wire 6. Fig. 3 is a view of one spool or drum 5. Fig. 4 is a view of the operating-crank 6^a, and Fig. 5 is a view of a modified form of my invention.

1 represents a bin or storehouse of any desired construction, provided in its top with a conveyer 2 for discharging the cotton-seed into the same. On opposite sides of the bin

1 parallel brackets 3 are secured and support between them shafts 4, on which are secured spools or drums 5, one end of the shafts 4 being angular for the reception of a crank 6^a for turning them. One crank may be used for both spools, or a separate crank may be provided for each. A wire or cable 6 is secured at its respective ends to the spools 5 and passed through the bin and is of a length equal to twice the distance between the spools and has provided thereon buttons 7, spaced apart to indicate in number of feet the length of the wire and to permit the operator to find the temperature of each and every portion of the pile and tell just where it is the warmest—as, for instance, if the wire is wound on the right-hand spool and the operator desires to ascertain the temperature of the pile he turns the left-hand spool to wind the wire thereon, letting the wire run through his hand, and he can tell by the temperature at the various buttons just where the pile is the warmest. The next time he takes the temperature of the pile he turns the right-hand spool, winding the wire thereon.

Instead of employing a wire or cable I might employ a chain or might employ an endless wire passing through the bin and pile, as shown in Fig. 5, and when this construction is employed I preferably wind the wire around one pulley or drum at least twice to increase the friction sufficiently to insure the moving of the wire when the pulley or drum is turned. Various other slight changes and alterations might be resorted to in the general form and arrangement of the several parts described without departing from the spirit and scope of my invention, and hence I would have it understood that I do not wish to limit myself to the precise details set forth, but consider myself at liberty to make such slight changes and alterations as fairly fall within the spirit and scope of my invention.

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

1. In a device for ascertaining the temperature of a pile of cotton-seed, seed-cotton and the like, the combination of a device sensitive to the changes of temperature and means connected with the respective ends thereof for moving it through the pile and fixed sup-

ports for said moving means to be disposed at respective sides of said pile.

2. In a device for ascertaining the temperature of a pile of cotton-seed, seed-cotton, and
5 the like, the combination of a flexible metal device sensitive to changes of temperature, and means connected with the respective ends thereof for moving it through the pile and fixed supports for said moving means to be
10 disposed at respective sides of the pile.

3. In a device for ascertaining the temperature of a pile of cotton-seed, seed-cotton, and

the like, the combination with a flexible metal device sensitive to changes of temperature, measuring devices thereon, and spools or 15 pulleys for moving the flexible metal device through the pile.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

GEORGE LEDER.

Witnesses:

GEO. W. TAYLOR,

S. W. FOSTER.