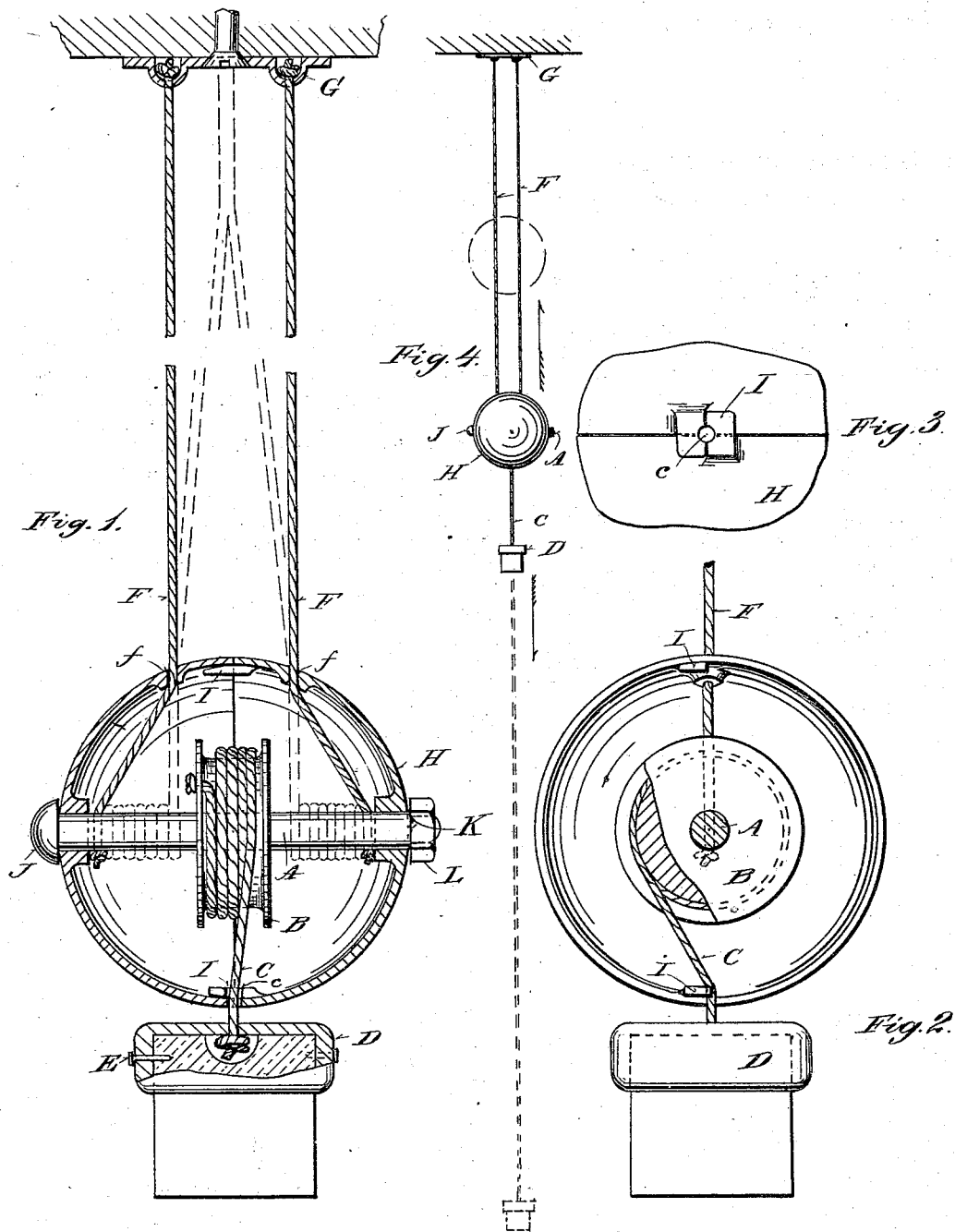


(No Model.)

L. B. LISLE.
CHALK CARRIER.

No. 455,569.

Patented July 7, 1891.



WITNESSES

H. M. Plaisted
C. A. Graves

INVENTOR

Lemuel B. Lisle
B. H. A. Coulman
his Attorney.

UNITED STATES PATENT OFFICE.

LEMUEL B. LISLE, OF SPRINGFIELD, OHIO.

CHALK-CARRIER.

SPECIFICATION forming part of Letters Patent No. 455,569, dated July 7, 1891.

Application filed October 25, 1890. Serial No. 369,268. (No model.)

To all whom it may concern:

Be it known that I, LEMUEL B. LISLE, a citizen of the United States, residing at Springfield, in the county of Clarke and State of Ohio, have invented certain new and useful Improvements in Chalk-Carriers, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to certain new and useful improvements in chalk-carriers; and it consists, essentially, of a spindle of varying diameter having an upper and a lower cord secured thereto, and adapted to wind up or shorten one cord and unwind or lengthen the other to a greater extent when actuated, and to automatically reverse the operation of both cords by gravitating action, whereby the chalk attached to the lower cord is automatically withdrawn out of the way after being drawn down for usage.

In the accompanying drawings, forming a part of this specification, and on which like reference-letters indicate corresponding parts, Figure 1 represents a side elevation of the spindle and the cords attached thereto, the inclosing case being shown in section; Fig. 2, an inside view of the inclosing case with my device mounted therein; Fig. 3, a plan view of the guide for the lower cord; and Fig. 4, a view of my device on a smaller scale, showing the vertical action thereof.

The letter A designates a spindle, on which is mounted or integrally formed thereon, so as to revolve therewith, a drum B. Thus two diameters are formed, on the larger of which is wound the cord C, secured to said drum by passing one end through an opening therein or otherwise, and adapted to hold a piece of chalk on the lower end thereof in any convenient manner. For instance, the cord may be secured to a chalk-cup D, in which the chalk is held by the pins E or otherwise. This constitutes the lower cord. The smaller diameter of the said spindle A has an upper cord F, preferably double, the lower end of each half passing through an opening in said spindle or otherwise secured thereto, and the upper end fastened to a plate G, secured to the ceiling or other convenient support. If desired, this upper supporting-cord may be single at the upper portion of its length and divided at its lower end, as indicated by the

dotted lines in Fig. 1. An inclosing case or frame H, of metal, papier-maché, or other suitable material, and preferably formed in semi-spherical halves and held together by said spindle A, as hereinafter described, is carried thereby, and has suitable openings *f* and *c*, which guide the upper and lower cords, respectively. Projecting lugs on each half of the said frame engage each other and secure the correct apposition of the same in their adjusted position. The lower lugs form a convenient guide for the cord C, as shown in Fig. 3. Any other suitable frame, either open or closed, may be used, or the frame may be entirely dispensed with, since the spindle is self-balanced, as will be observed in the operation thereof, now to be described.

Figs. 1, 2, and 4 show the normal position of my device in full lines, and Fig. 4 the vertical action thereof when the chalk is drawn down for usage. The chalk is suspended at a convenient height above the head within easy reach, and the spindle may be located at any suitable distance from the ceiling. When the chalk is drawn down by hand, the cord C unwinds from the drum B, thus revolving the spindle A, and winding up the lower portion of the cord F thereon, as indicated in Fig. 1. This action elevates the spindle, while it brings the chalk conveniently near for usage. When the chalk is released, the cord F unwinds because of the weight of the spindle, thus revolving it and winding up the cord C. It will be observed from Fig. 2 that the larger diameter is preferably about four times that of the smaller. The lower cord will therefore unwind four times as fast as the upper cord will wind up. In other words, if four feet of the lower cord is drawn from the drum B the spindle will be raised one foot, as shown in Fig. 4, by the winding up of the upper cord, and the chalk will be lowered three feet. Any convenient ratio between the larger and smaller diameters of the spindle may be used; but the idea is to elevate the spindle by drawing down the chalk, so that on releasing the chalk the weight of said spindle will cause the upper cord to unwind and revolve the spindle, thus winding up the lower cord and raising the chalk out of the way. This action is due to gravity, and the device is very simple in its parts, having no

springs or other mechanism likely to get out of order.

Any convenient chalk-cup may be used, and in this specification the term "cord" is intended to include a band or chain or the equivalent.

If the inclosing case H is used, the spindle A preferably has a head J and a threaded portion forming a shoulder K, against which the nut L is screwed. This arrangement holds the halves of said case in their proper position, while allowing of the required play of the said spindle. The cord F is preferably attached to said spindle, so as to be wound thereon without overlapping itself, as indicated in Fig. 1.

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

In a chalk-carrier, the combination, with an inclosing case or frame having guides, of a spindle of varying diameter mounted therein, cords running in said guides and adapted to rotate said spindle substantially in the manner set forth, a supporting-plate for one cord, and a chalk-holder for the other cord.

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

LEMUEL B. LISLE.

Witnesses:

J. J. MILLER,
A. E. JONES.