## T. B. MILLER. CHALK LINE HOLDER.

(Application filed Feb. 8, 1900.)

(No Model.) Tig.R. RO INVENTOR T.B. Miller. ATTORNEYS.

## UNITED STATES PATENT OFFICE.

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## CHALK-LINE HOLDER.

SPECIFICATION forming part of Letters Patent No. 648,044, dated April 24, 1900.

Application filed February 8, 1900. Serial No. 4,495. (No model.)

To all whom it may concern:

Be it known that I, THOMAS B. MILLER, a citizen of the United States of America, residing at McKeesport, in the county of Alle-5 gheny and State of Pennsylvania, have invented certain new and useful Improvements in Chalk-Line Cases, 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-line cases and is particularly adapted for use in connection

with tape-measures or chalk-lines.

The object of my invention is to construct 15 a chalk-line case provided with means to permit of the chalk contained in the case coming into contact with the tape measure or line, so that when the same is pulled from the case and operated in the usual manner for mark-20 ing a sufficient quantity of chalk will be deposited, making a clear and distinct line.

With the above and other objects in view the invention finally consists in the novel construction, combination, and arrangement of 25 parts to be hereinafter more fully described,

and specifically pointed out in the claims.

In describing the invention in detail reference is had to the accompanying drawings, forming a part of this specification, and 30 wherein like numerals of reference indicate corresponding parts throughout the several

views, in which-

Figure 1 is a side view of my improved chalk-line case. Fig. 2 is a vertical sectional view taken on the line 22 of Fig. 1. Fig. 3 is a front view of one of the agitating-wheels forming one side of the reel. Fig. 4 is a front view of the operating-pinion and revolving rack. Fig. 5 is a longitudinal sectional view 40 of a portion of the reel, bearing-shaft, and pinion. Fig. 6 is a cross-sectional view of the upper portion of the case, showing the outer end of the tape-measure or chalk-line.

Referring to the drawings by reference-nu-45 merals, 1 and 2 indicate a pair of cylindricalshaped telescopic sections forming the case, each having its outer face provided with a circumferential groove 3. Formed centrally of the inner face of the section 1 is a bearing-50 stub 4, upon which is mounted a hollow bearing-shaft 5, carrying on its one end a rotating | my improved chalk-line can be readily underpinion 6. Mounted upon the bearing-shaft 5 | stood from the foregoing description taken in

and keyed, as at 7, to the pinion 6 is my improved reel, which consists of a hollow sleeve or hub 8, provided at each end with a pair 55 of diametrically-opposite lugs 9 for securing thereto the agitating-wheels 10, forming the sides of the reel. These agitating-wheels are provided centrally with an opening 11, having a pair of diametrically-arranged notches 60 12, to permit of the mounting and securing of the same upon the hub or sleeve 8. Each of the wheels is provided with radially-arranged openings 13 to permit of the passage of the chalk therethrough. The outer ends of the 65 wheels are bent in a curvilinear manner, as at 14, which operate within the grooves 3.

The section 2 is provided at its lower end with an opening in which rotates a bearingsleeve 15, formed integral with a disk 16, 70 having its inner face formed with a concentric rack 17. This rack is operated by means of a handle 18, suitably secured to the sleeve 15. Secured to the inner face of the section 2 is an auxiliary easing 19, provided with an 75 opening through which projects the hub or bearing-shaft. The section 1 is provided with an offset 20 to limit the movement of the section 2 when telescoping one within the other.

The operation of my improved chalk-line 80 case is as follows: Assuming that section 1 has been removed and a quantity of chalk placed therein, the section is replaced, and as the tape or line 21 is withdrawn through the nipple 22 the same will revolve the wheel, car- 85 rying the agitating-wheels therewith, agitate the chalk, force the same into contact with the tape measure or line, so that when the line or measure is used a sufficient quantity of chalk will be deposited to make a clear 90 line. When it is desired to wind the tape measure or line upon the reel, the handle 18 is revolved, thereby operating the rack 17, causing the hub and the pinion 6 to revolve, thereby rotating the reel and causing the tape 95 or line to wind thereon. It will of course be observed that not only does the wheel 10 agitate the chalk by the arrangement of the openings, but prevents the chalk from clogging, as the same can pass through the openings at 100 each side of the tape measure or line.

It is thought that the many advantages of

connection with the accompanying drawings, and it will be noted that various changes may be made in the details of construction without departing from the general spirit of my 5 invention.

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

Letters Patent, is-

1. A chalk-line case consisting of two tele-10 scopic sections, a bearing-stub formed integral with the inner face of one of said sections, a bearing-shaft mounted on said stub, a rotating pinion suitably connected to said shaft, and a reel suitably mounted on said shaft and 15 connected to said pinion, and means for re-

volving the said pinion. 2. In a chalk-line case, the combination of a pair of telescopic sections, a bearing-stub formed integral with the inner face of one of 20 said sections, an auxiliary casing connected to the inner face of the opposite section, a bearing-shaft supported by said stub in the said auxiliary casing, a revolving pinion suitably connected to said shaft and operating 25 within said auxiliary easing, a reel mounted upon said bearing-shaft connected to said pin-

ion and operated thereby, and means for operating said pinion.

3. In a chalk-line case, the combination of a pair of telescopic sections, a bearing-stub 30 formed integral with the inner face of one of said sections, an auxiliary casing connected to the inner face of the opposite section, a bearing-shaft supported by said stub in the said auxiliary casing, a revolving pinion suit- 35 ably connected to said shaft and operating within said auxiliary easing, a sleeve or hub mounted upon said shaft and connected to said pinion and operated thereby, an agitatorwheel provided with a series of circumferen- 40 tially-arranged openings connected to said sleeve and rotated therewith, a revolving concentric rack meshing with said pinion and adapted to operate the same, and means for operating said rack, substantially as set forth. 45

In testimony whereof I affix my signature

in the presence of two witnesses.

THOMAS B. MILLER.

Witnesses: JOHN NOLAND, E. W. ARTHUR.