(No Model.)

E. WALKER.

DEVICE FOR CHALKING LINES.

No. 497,362. Patented May 16, 1893.

Fig. 1.

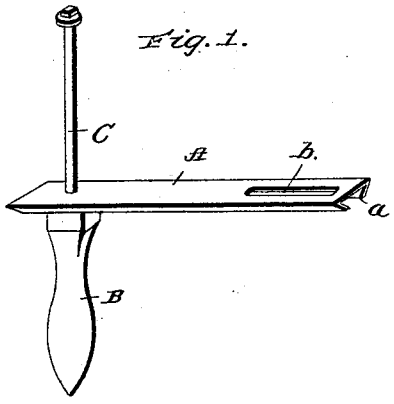


Fig. 2.

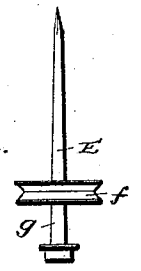


Fig. 3.

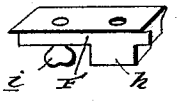


Fig. 4.

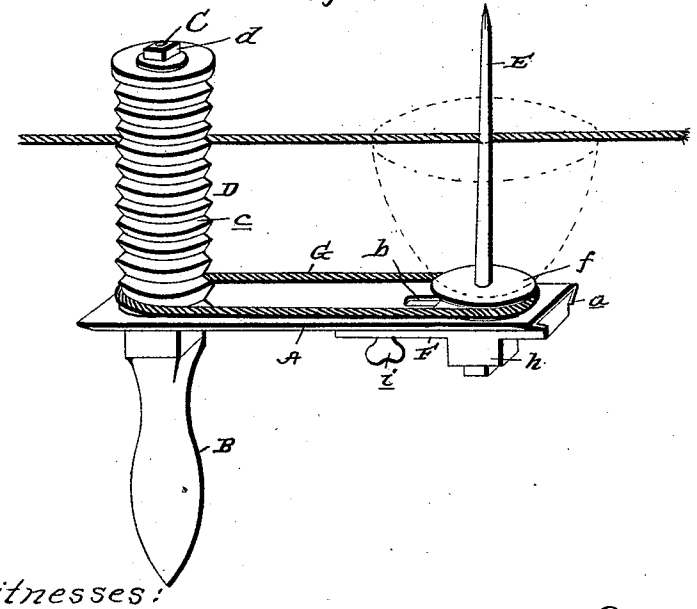
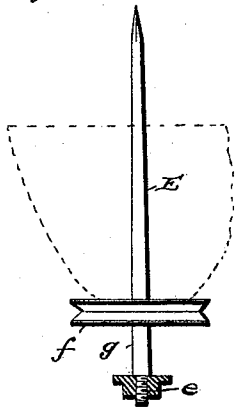


Fig. 5.



Witnesses:
C. A. Raeder
W. F. Matthews.

Inventor
Ernest Walker.
By James J. Sheehy
Attorney

UNITED STATES PATENT OFFICE.

ERNEST WALKER, OF NEW ALBANY, INDIANA.

DEVICE FOR CHALKING LINES.

SPECIFICATION forming part of Letters Patent No. 497,362, dated May 16, 1893.

Application filed September 4, 1891. Serial No. 404,799. (No model.)

To all whom it may concern:

Be it known that I, ERNEST WALKER, a citizen of the United States, residing at New Albany, in the county of Floyd and State of Indiana, have invented certain new and useful Improvements in Devices for Chalking Lines; and I do 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.

This invention relates to a device for chalking lines or cords, such as used by carpenters and other mechanics.

Among other things the invention has for its object to provide a device at a comparatively small expense which may be conveniently operated without a loss of time or waste of the chalk.

A further object of the invention is to adapt the chalk holder to receive a rotary motion in passing along or over the line or cord; to provide a guide for the line to the chalk and to provide means for imparting motion from the guide to the chalk and its holder, and to also provide an effective means for tightening the connection or taking up slack therein.

Other objects and advantages will appear from the following description and claims when taken in connection with the annexed drawings, in which—

Figure 1, is a perspective view of a main frame; the chalk holder and securing devices being removed. Fig. 2, is a view of the chalk holding spindle and its guide pulley. Fig. 3, is a perspective view of the bearing and adjusting block for said spindle. Fig. 4, is a perspective view of the entire device in an operative position, illustrating the chalk in dotted lines. Fig. 5, is a view of the chalk receiving spindle and its drive pulley, with the chalk illustrated in dotted lines thereon.

In carrying out my invention I take a bar or strip A, of metal or other suitable material, and of a sufficient length and width to constitute the main frame. This strip is provided on its under side and longitudinal edges with flanges *a*, which may be of dovetail form in cross section and are designed to receive and form a seat and guide for the chalk spindle bearing as will be presently described. This frame or strip is provided on its under side at one end with a suitable handle B, which may be of wood or other suitable material and the opposite end of said frame or strip, is provided with a longitudinally disposed slot *b*, to receive the journal portion of the chalk spindle or holder.

C, indicates a spindle or rod which rises vertically from the frame A, at one end and above the handle.

D, indicates a drum or cylindrical guide. This cylindrical guide has its surface provided with circular grooves *c*, to receive cords or lines to be chalked. This cylindrical groove guide is provided with a longitudinal bore and is received by the rod or spindle C, a nut *d*, or other suitable fastening device being employed on the upper end of the spindle to hold the guide in position.

E, indicates the rod or spindle which has its upper end preferably pointed and its opposite end externally screw threaded as shown at *e*. This spindle carries a pulley *f*, at a suitable distance from its lower end as shown and said pulley may be fixed to the spindle by any suitable well known means so as to form a journal portion *g*, between the under side of said pulley and the threaded end of the spindle for a purpose which will presently appear.

F, indicates a slide bearing for the chalk spindle. This bearing may be composed of a block of wood or the like and has its opposite longitudinal edges beveled to correspond with the grooves or flanges in the under side of the frame A, and is designed to be placed therein. This slide bearing is furthermore provided near one end with a vertically disposed aperture to receive the journal end of the spindle E, and surrounding said aperture I prefer to provide a lug or boss *h*, so as to give more surface to the journal portion of the spindle. The bearing also carries at a suitable distance from its opposite end, a wing nut or screw *i*, which is designed to impinge against or take into the under side of the frame A, so that said bearing may be adjustably secured to the frame.

G, indicates an endless guide belt or cord. This cord takes over the fluted or grooved guide cylinder at its base and from thence it passes around the grooved guide pulley *f*, fixed

to the chalk holding spindle so that when motion is given to said guide it will impart a similar and simultaneous motion to the chalk holder.

The usual commercial form of the chalk is illustrated in dotted lines.

In operation after the slide bearing has been placed in the guides on the under side of the frame, and beneath the elongated slot therein, the spindle E, after having the nut at the lower end removed, is let down through said slot and into the journal aperture of the bearing, after which the nut is replaced. The guide cylinder having been placed upon the spindle C, and secured in position by means of the nut *d*, and the rope or belt G, placed over both the guide and the pulley *f*, of the chalk holding spindle, by simply manipulating the wing nut or screw *i*, the drive belt or cord may be sufficiently tightened to impart motion from the cylinder to the chalk holder. The chalk in its present form of manufacture being without the aperture through its center, it will of course be necessary to bore a hole therein for the reception of the spindle, and the chalk is designed to fit sufficiently snug upon said spindle that it will rotate or move with it.

In Fig. 4, of the drawings I have illustrated a line or cord in a position to be chalked, and to operate the device it is simply necessary to grasp the handle B, and place the guide cylinder against the line or cord, and move it gently back and forth upon the same; the chalk of course bearing also against the line. The frictional contact of the cylinder with the line, will impart a rotary motion to the former and through the medium of the belt or rope connection such motion will be imparted to the chalk holder and consequently to the chalk thereon.

While I have described specifically the parts in the construction and combination as shown, yet I do not wish to be understood as limiting myself to such specific constructions and combinations of devices for the purpose described, as it is obvious that many changes and modifications may be made without departing from the spirit of my invention.

Having described my invention, what I claim is—

1. A device for chalking lines having a rotatable guide, a rotatable chalk holder, and a connection for imparting motion from the guide to the holder, substantially as specified.

2. A device for chalking lines, having a rotatable guide, a rotatable chalk holder adjustable to and from the guide, and a connection for imparting rotary motion from the guide to the chalk holder, substantially as specified.

3. The device for chalking lines, comprising a frame, having a guide-way in its under side and an elongated slot at one end and a handle at the opposite end, a slide bearing arranged in said way and carrying means for adjustably securing it to the frame, a spindle adapted to receive chalk, and having a drive pulley and arranged in said slide bearing, a spindle rising from the opposite end of the frame, a fluted or grooved cylindrical guide arranged on said spindle and a rope or belt connecting the pulley of the chalk spindle with the guide, substantially as specified.

ERNEST WALKER.

Witnesses:
F. WALKER,
HERBERT G. WALKER.