

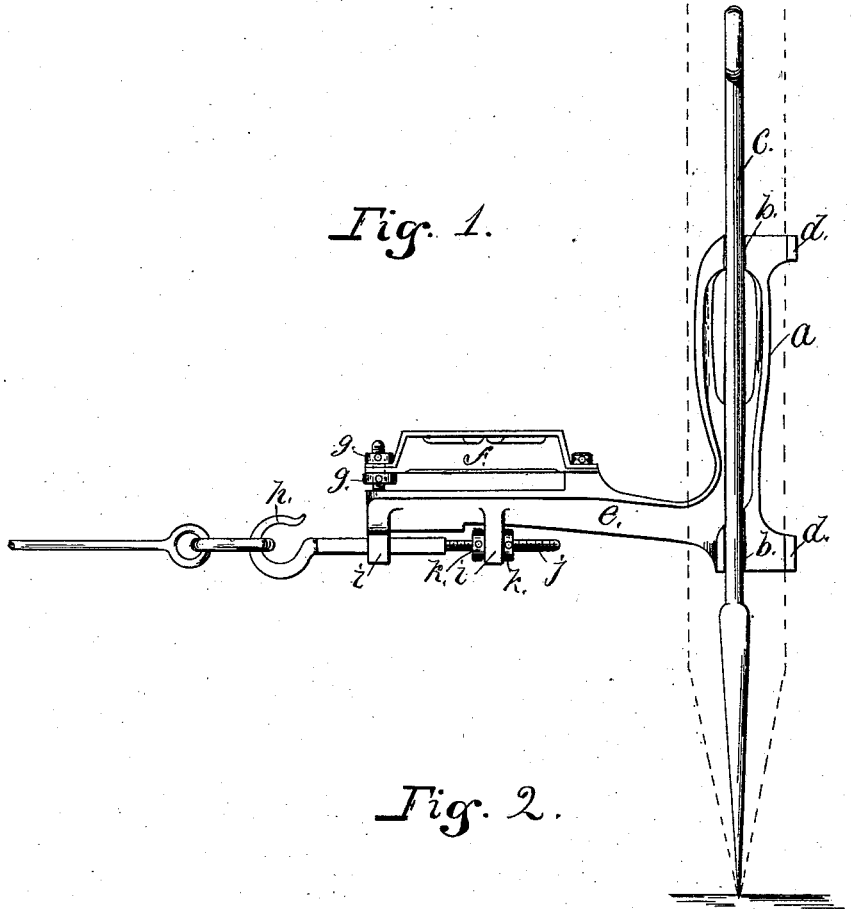
(No Model.)

G. W. DICKINSON.  
SURVEYOR'S CHAIN HANDLE.

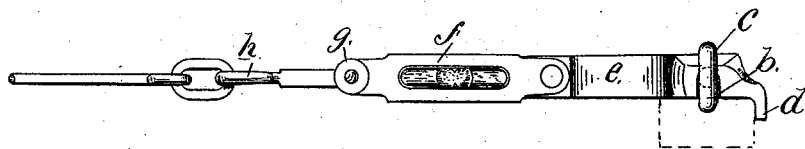
No. 301,869.

Patented July 15, 1884.

*Fig. 1.*



*Fig. 2.*



Witnesses.  
*Jacob W. Loepker*  
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Inventor:  
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# UNITED STATES PATENT OFFICE.

GEORGE W. DICKINSON, OF CHARLESTON, ILLINOIS.

## SURVEYOR'S-CHAIN HANDLE.

SPECIFICATION forming part of Letters Patent No. 301,869, dated July 15, 1884.

Application filed May 3, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE W. DICKINSON, a citizen of the United States, residing at Charleston, in the county of Coles, State of Illinois, have invented a new and useful Improved Surveyor's-Chain Handle, of which the following is a specification.

My invention relates to an improved handle to be attached to one or both ends of a surveyor's chain or measuring-line.

The object of my improvement is to avoid, in the measuring of distances in surveying lands, mistakes arising from the tally-pins out of a true perpendicular, as hereinafter described. I accomplish the above-mentioned object by means of the device illustrated in the accompanying drawings.

Figure 1 is a side elevation of my device. Fig. 2 is a plan.

*a* is a handle, having in one side notches *b b*, adapted to receive sidewise a tally-pin, *c*, such as ordinarily used by surveyors.

*d d* are lugs equidistant from notches *b b*, and projecting outward from the handle to receive the edge of a staff, as shown in dotted lines, the purpose being to apply the handle accurately in line with either a tally-pin or a staff, as may be required.

*e* is an arm formed integral with handle *a*, and projecting therefrom at a right angle with the line of notches *b*.

*f* is a spirit-level secured to the upper side of arm *e*, one end being adjustable relatively to the arm by means of screw-washers *g g*.

*h* is a hook adapted to receive the ring on the end of the chain or measuring-line *l*. Said hook is secured to arm *e* in such a manner as to be adjustable toward or from the line of notches *b*. As shown, the hook has a shank passing through lugs *i i* on the arm, and terminating in a screw, *j*, on which are screw-washers *k k*.

In operation one of my improved handles is attached by means of the hook *h* to each end of the chain or measuring-line, the distance from the end of the chain to the center of notches *b* being exactly adjusted by means of screw-washers *k k* to an even number of inches, which distance is considered a part of the length of the chain. One of the handles *a* is now applied to a staff or tally-pin erected at the point of starting, the edge of the staff resting against the inside of lugs *d*, or the pin resting in the notches *b*, and the staff or pin is plumbed by means of the spirit-level *f*. The person carrying the other end of the measuring-line applies a tally-pin to the notches *b* in the handle at his end of the line, and holding the pin plumb, as indicated by the spirit-level *f*, sticks the pin in the ground, thus accurately measuring the distance between the two points.

I claim as my invention—

1. As an article of manufacture, a terminal handle for a measuring-line, consisting of a handle having notches or projecting lugs, whereby it may be accurately applied to and in line with a staff or tally-pin, an arm at a right angle to said handle, a spirit-level on said arm, and means for connecting said arm to the end of a measuring-line, all combined substantially as and for the purpose specified.

2. Handle *a*, having notches *b b*, arm *e*, spirit-level *f*, and adjustable hook *h*, all combined substantially as and for the purpose specified.

3. Handle *a*, having notches *b b* and lugs *d d*, arm *e*, level *f*, and hook *h*, all combined substantially as and for the purpose specified.

GEORGE W. DICKINSON.

Witnesses:

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FRANK A. BLACKFORD.