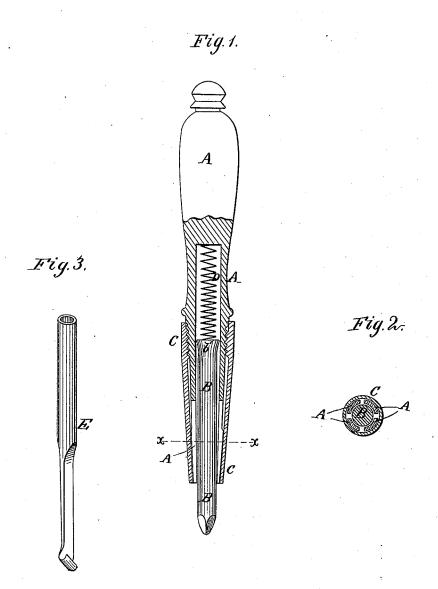
## F. W. ALLEN & D. CRANE. Pencil.

No. 211,489.

Patented Jan. 21, 1879.



WITNESSES: Henry N. Miller C. Sedgwick INVENTOR:

F.M. Allen

BY D. Grane

Lumta

ATTORNEYS.

## UNITED STATES PATENT OFFICE.

FRANCIS W. ALLEN AND DANIEL CRANE, OF SAGINAW, MICHIGAN.

## IMPROVEMENT IN PENCILS.

Specification forming part of Letters Patent No. 211,489, dated January 21, 1879; application filed July 6, 1878.

To all whom it may concern:

Be it known that we, Francis W. Allen and Daniel Crane, of Saginaw city, in the county of Saginaw and State of Michigan, have invented a new and useful Improvement in Pencils for Marking Lumber, Logs, and Timber, of which the following is a specification:

Figure 1 is a longitudinal section of our improved pencil. Fig. 2 is a cross-section of the same, taken through the line x x, Fig. 1. Fig. 3 is a detail view of the cutter.

Similar letters of reference indicate corre-

sponding parts.

The object of this invention is to furnish an improved tool, called by us "The Inspector's Pencil," and especially designed for inspectors'

Pencil," and especially designed for inspectors' use for marking rough lumber, and which shall be simple in construction and convenient in

use.

A represents the handle of the marker, which is made of a single piece of wood, and is perforated longitudinally to receive the blacklead crayon B. The forward end of the handle A has longitudinal slits formed in it to form jaws to clamp the lead B. The outer side of the jaws or forward end of the handle A is tapered or made conical, as shown in Fig. 1, to adapt it to be pressed together by the conical ferrule C to clamp the lead B. The conical ferrule C has a screw-thread cut or crimped upon the inner surface of its inner end or base,

to be screwed upon a screw-thread cut in the outer surface of the handle A. In the inner part of the perforation of the handle A is placed a spiral spring, D, against the outer end of which rests the inner end of the lead B, so as to force the said lead outward when the ferrule C is loosened. The inner end of the lead B has a conical enlargement, b', formed upon it, as shown in Fig. 1, to keep it from being forced entirely out of the handle by the tension of the spiral spring D when the ferrule C is loosened.

When permanent marks are to be made upon the lumber, the lead B is removed and replaced by the cutter E, the shank of which is made hollow to receive the forward end of the spiral spring D.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

A pencil-holder consisting of a handle, A, and clamping ferrule C, the former being endslitted, and provided with a spring at the upper end of its pencil-cavity, as and for the purpose specified.

FRANCIS WILLIAM ALLEN. DANIEL CRANE.

Witnesses:

N. S. LOCKWOOD, CHARLES E. BRENNER.