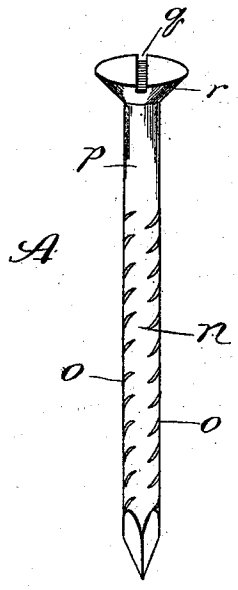
(No Model.)

W. V. KAY.

NAIL.

No. 418,844. Patented Jan. 7, 1890.



Witnesses:
Chas. E. Gaylord.
J. H. Dyrenforth.

Inventor:
William V. Kay.
By Dyrenforth & Dyrenforth.
Attys

N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

WILLIAM V. KAY, OF CHICAGO, ILLINOIS.

NAIL.

SPECIFICATION forming part of Letters Patent No. 418,844, dated January 7, 1890.

Application filed April 12, 1889. Serial No. 306,951. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM V. KAY, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Nails, of which the following is a specification.

My invention relates to improvements in the form of nail having its shank or a portion thereof barbed or threaded for the purpose of augmenting its securing property by increasing its hold on the wood into which it is driven.

The primary object of my improvement is to provide a nail having a thread formed on its shank for the purpose stated, but which shall not in being driven materially tear the fiber of the wood; and a further object is to afford means for turning the nail when driven to effect its tightening or withdrawal in the manner of drawing a screw.

To these ends my invention consists in a nail having a screw-thread formed spirally on its shank portion and interrupted at intervals longitudinally of the shank portion by unthreaded or blank spaces.

It also consists in providing such a nail with a "screw-head," or head having a diametrical slot in its top to admit a screw-driver; and it further consists in details of construction and combinations of parts.

The accompanying drawing shows in perspective a pointed nail of the "wire-nail" variety provided with my improvements.

A is a nail having a head *r* at one extremity, which should be provided with a diametrical slot *q* and pointed at its opposite extremity. Below the head the shank portion *p* should be smooth or "blank" for some distance, (say about one-third of its length,) and from the extremity or pointed end the shank is provided with a spiral thread *o*, which is interrupted or broken at intervals, thereby affording unthreaded, smooth, or blank spaces *n* at intervals around the shank and longitudinally thereof from the end or point to the end of the spiral thread. Owing to the nature of the article represented, but one space *n* can readily be shown in the drawing. In practice, however, I provide three such spaces at equal distances apart along the shank, though that number may be varied without departing from my invention.

The nail may be driven and withdrawn like any other nail, and, as will readily be apparent, without material tearing or injury from the thread to the fiber of the material into which it is driven; and it may also be tightened in place or withdrawn like a screw on turning it properly for either purpose through the medium of a screw-driver or other suitable means.

What I claim as new, and desire to secure by Letters Patent, is—

1. A nail having a spiral thread *o* on its shank portion and continuous blank spaces *n* interrupting the continuity of the spiral thread at intervals around the shank portion and lengthwise thereof, substantially as and for the purpose set forth.

2. A nail having a slotted head *r* and provided with a spiral thread *o* on its shank portion and with continuous blank spaces *n* interrupting the continuity of the spiral thread at intervals around the shank portion and lengthwise thereof, substantially as and for the purpose set forth.

WILLIAM V. KAY.

In presence of—
J. W. DYRENFORTH,
M. J. BOWERS.