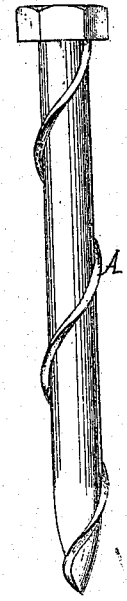
A. C. & I. L. DUNN

Screw-Threaded Spike.

No. 83,699. Patented Nov. 3, 1868.



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ALPHEUS C. DUNN AND ISAAC L. DUNN, OF NEW YORK, N. Y., ASSIGNORS TO PHILIP DUNN AND JAMES YATES, OF TRENTON, NEW JERSEY.

Letters Patent No. 83,699, *dated November* 3, 1868.

IMPROVEMENT IN SPIKES WITH SCREW-THREADS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that we, ALPHEUS C. DUNN and ISAAC L. DUNN, of the city, county, and State of New York, have invented a new and useful Improvement in Spikes and Nails; and we do hereby declare that the following is a full, clear, and exact description of the same, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

The object of this invention is to so form the spikes used in the construction of ships, boats, and all marine vessels, and in the construction of railroads, and for all other purposes of a similar nature, and for all purposes for which spikes are used, and also nails used for building-purposes, and for all other purposes for which nails are used, that they shall not fail or draw out from the wood, by any strain on the parts held together by them, but shall keep their places and hold to the wood, and accomplish the object for which spikes and nails are used; and the invention consists in forming on the surface of spikes and nails a spiral rib or feather, which shall penetrate the wood as the spikes or nails are driven, and form spiral grooves therein, which rib or feather, having thus penetrated the wood, shall hold the spike or nail to its place, and the parts of wood through and into which they may be driven, and thereby accomplish the object for which spikes and nails are used, in a manner greatly superior to that of the ordinary spikes and nails.

The drawing represents a spike constructed according to our invention. The nail is made in the same manner, the only difference being in the size. Either may have any desired-shaped head, to adapt it to the particular purpose for which it may be used. Both the spikes and the nails are made of round rods or round wire, of any desired diameter, and of any suitable metal.

The said rib or feather A is formed by being raised, by means of suitable dies or presses, while the iron or metal from which the spike or nail is made is hot, so that, by pressing, the pores of the metal are brought together much more compactly, which gives much greater strength to a nail of a given size, and at the same time forms a most perfect rib or feather.

The rib or feather may be of any desired form, but its sides should form an acute angle.

A represents the spiral rib or feather, which may extend from the head, or near it, to the end of the spike or nail, or near the end, and be placed on the spike or nail at such a pitch or angle that, in driving them, the rib or feather shall not break the wood, but form a groove or channel for itself as it is driven by the hammer. The spike or nail, in being thus driven, will turn round in the wood, and be governed, in turning, by the spiral rib or feather, turning more or less, according to the form or pitch of the spiral.

The pitch or spiral, as before stated, may be such as to allow the spike or nail to be driven into the wood with a hammer, or be forced in by a longitudinal motion, without breaking or forcing the rib or feather from its groove.

These spikes and nails are not intended for being turned into the wood by any tool or device, but only to be driven by the hammer or sledge.

It is understood that a short rib or feather is made immediately under the head of the spike or nail, running longitudinally with the spike, say about one-fifth the length of the spike, more or less, so as to prevent the spike from turning after having been driven.

From this construction, it will be readily seen that it is impossible for a spike or nail made in this manner, when once driven, to become loose and turn out.

We are aware that bolts, with spiral threads, are not new; but the objection found in their construction has been, that the spiral thread has been found, in most cases, too close; that the strength of wood is injured by it in driving; and the object of this invention is to improve that point—to have wood between the spiral thread with sharp edges, and separate the threads, so that they may be driven without requiring too much force, and leave the wood sound, and the body or shaft of the bolt or spike solid, which cannot be done in twisted threads.

What we claim, is—

The construction of the bolt, to conform to the form shown, and in the manner described.

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ISAAC L. DUNN.

Witnesses:
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