

G. N. SANDERS.
Spikes.

No. 164,878.

Patented June 22, 1875.

Fig: 1.

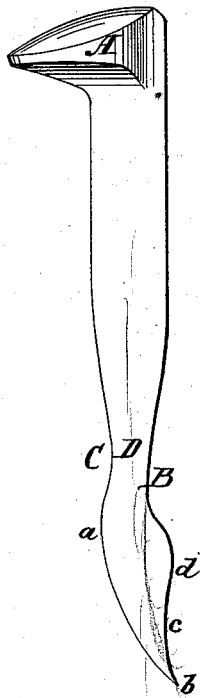
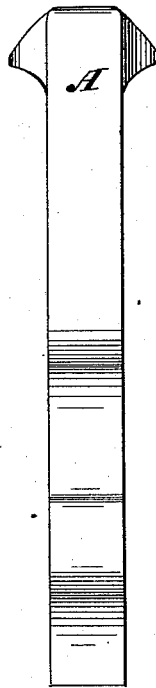


Fig: 2.



Witnesses:

*Lewis Sanders
E. Schuck*

Inventor:

G. N. Sanders

UNITED STATES PATENT OFFICE.

GEORGE N. SANDERS, OF NEW YORK, N. Y.

IMPROVEMENT IN SPIKES.

Specification forming part of Letters Patent No. **164,878**, dated June 22, 1875; application filed May 6, 1875.

CASE C.

To all whom it may concern :

Be it known that I, GEORGE N. SANDERS, of the city of New York, State of New York, have invented the hereinafter-described Improved Curvo-Spike, being an improvement in the original secured by Letters Patent No. 140,844, dated July 15, 1873, to the late George N. Sanders and myself, and also in the improved curvo-spikes secured to myself by Letters Patent No. 159,457, dated February 2, 1875, and No. 159,611, dated February 9, 1875, of which improved spike herein claimed the following is the specification :

Referring to the figures in the accompanying drawing, A is the head; B, the depression in the back of the spike; C, the depression in the front of the spike; D, the neck; *a b*, the convex bevel; *b*, the point, and *b c d* the concaving opposite the bevel.

Figure 1 shows a side view, and Fig. 2 a rear view of the spike.

The improvement consists in making the spike with both the depressions B and C, so as to throw the neck D into the axis of the spike, enabling it to be thinner without liability to bend before entering the wood; both depressions sloping gradually, so as to form the sloping protuberances shown at *a* and *d*.

The concaving *b c d* is preferred, but not considered essential. It may be that this form is inferior for the ordinary railway-track, as the depression C on the same side as the hook interferes with the ease and accuracy of driving; but there are other applications where this form would be desirable.

The shape of the head and of the perimeter of the shank is immaterial, except that they should be fitted to the use for which the spike is intended. The various sizes are adapted to the uses of spikes, bolts, pins, nails, and similar fastenings secured by being driven into wood or other material.

I claim as my invention herein—

The improved curvo-spike A D, with the neck D, formed by the two depressions B and C, and with the convex bevel *a b*, substantially as and for the purposes described.

In testimony whereof I have hereunto subscribed my name in the presence of two witnesses this 4th day of May, A. D. 1875, at the city of New York.

GEO. N. SANDERS.

Witnesses :

LEWIS SANDERS,
JAMES MULLEN.