

G. N. SANDERS.
Spike.

No. 159,457.

Patented Feb. 2, 1875.

Fig: 1.

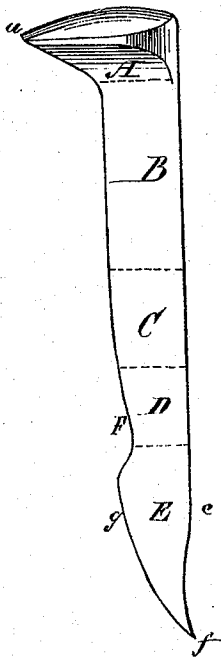
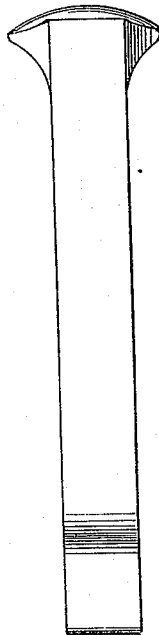


Fig: 2.



Witnesses:

Louis Wagner
Lewis Sanders

Inventor:

Geo Sanders

UNITED STATES PATENT OFFICE.

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

IMPROVEMENT IN SPIKES.

Specification forming part of Letters Patent No. **159,457**, dated February 2, 1875; application filed May 12, 1874.

To all whom it may concern:

Be it known that I, GEORGE N. SANDERS, counsellor at law, of No. 39 Nassau street, New York city, State of New York, have invented the Improved Curvo Spike, hereinafter described, (the original being secured by Letters Patent No. 140,844, dated July 15, 1873, to the late George N. Sanders and myself, the inventors,) of which the following is a specification:

Referring to the figures in the accompanying drawing, A is the head; B, the upper part; C, the shoulder; D, the neck; E, the tail; F, the new depression in the front side, forming the shoulder, neck, and tail.

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

The improvement consists in making the spike with a depression, as F, on the same side as the bevel *f g*, sloping gradually, so as to form the sloping protuberance shown at *g*, which is the essential feature, the thickness of the neck varying with the object for which the spike is used. It is preferred that the point of the spike should be concaved, as shown at *e f*, but this is not essential. In this form the shoulder tends to press the head backward instead of forward, and this property better adapts the spike to street-railroads, (where countersunk heads are used,) ship and bridge building, and other uses where the top of the spike is required to stand vertical or perpen-

dicular to the surface of the material into which it is driven, or rather to keep the same line that the spike is started in, and the head not to press in any direction, for the shoulder C tends to counteract the deflecting force of the bevel, as far as the upper part B is concerned, and may be made to do so exactly. Again, when the hook *a* is reversed, and it is desired that the head shall press in that direction, this may be accomplished by simply increasing the shoulder.

The shape of the head and of the perimeter of the shank are immaterial, except that they should be fitted to the uses 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—

The improved curvo spike A B C D E, constructed as shown, as and for the purposes set forth.

In testimony whereof I have hereunto subscribed my name in the presence of two witnesses, this 8th day of May, 1874, at the city of New York.

GEO. N. SANDERS.

Witnesses:

LOUIS A. WAGNER,
LEWIS SANDERS.