

(No Model.)

J. W. G. SMITH.

NAIL.

No. 309,414.

Patented Dec. 16, 1884.

Fig. 1

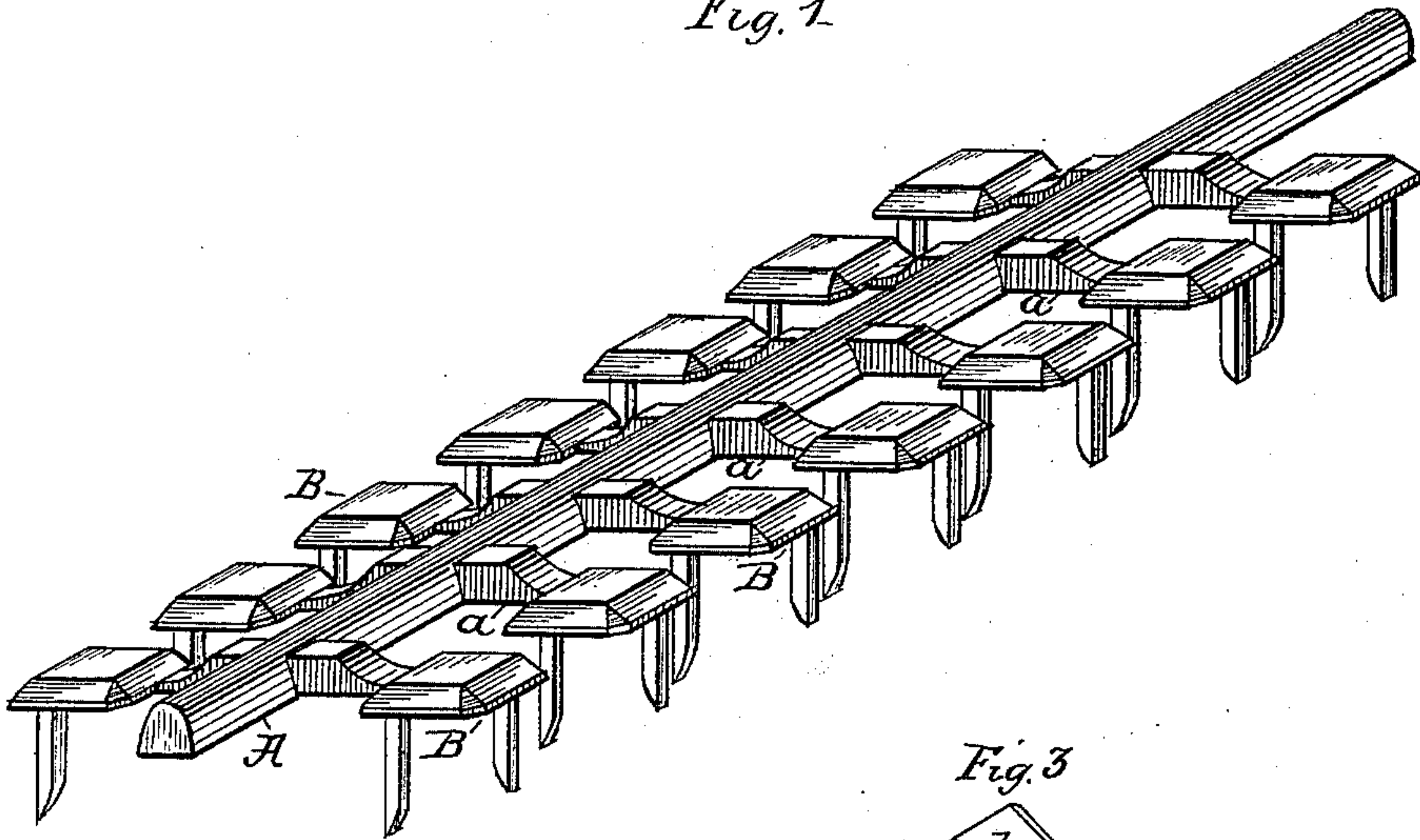


Fig. 3

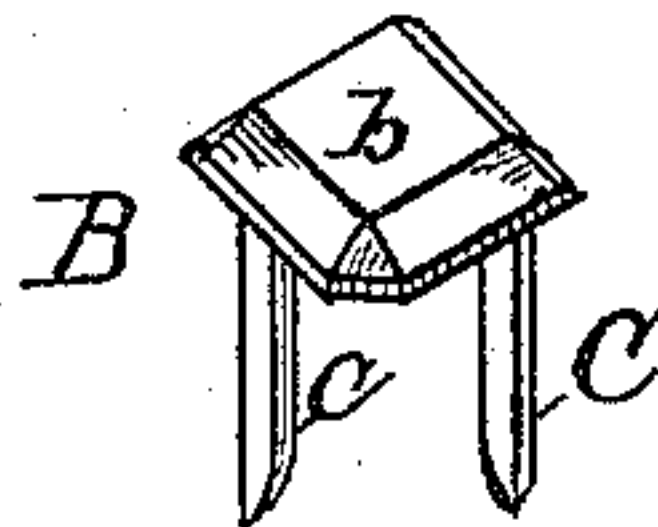
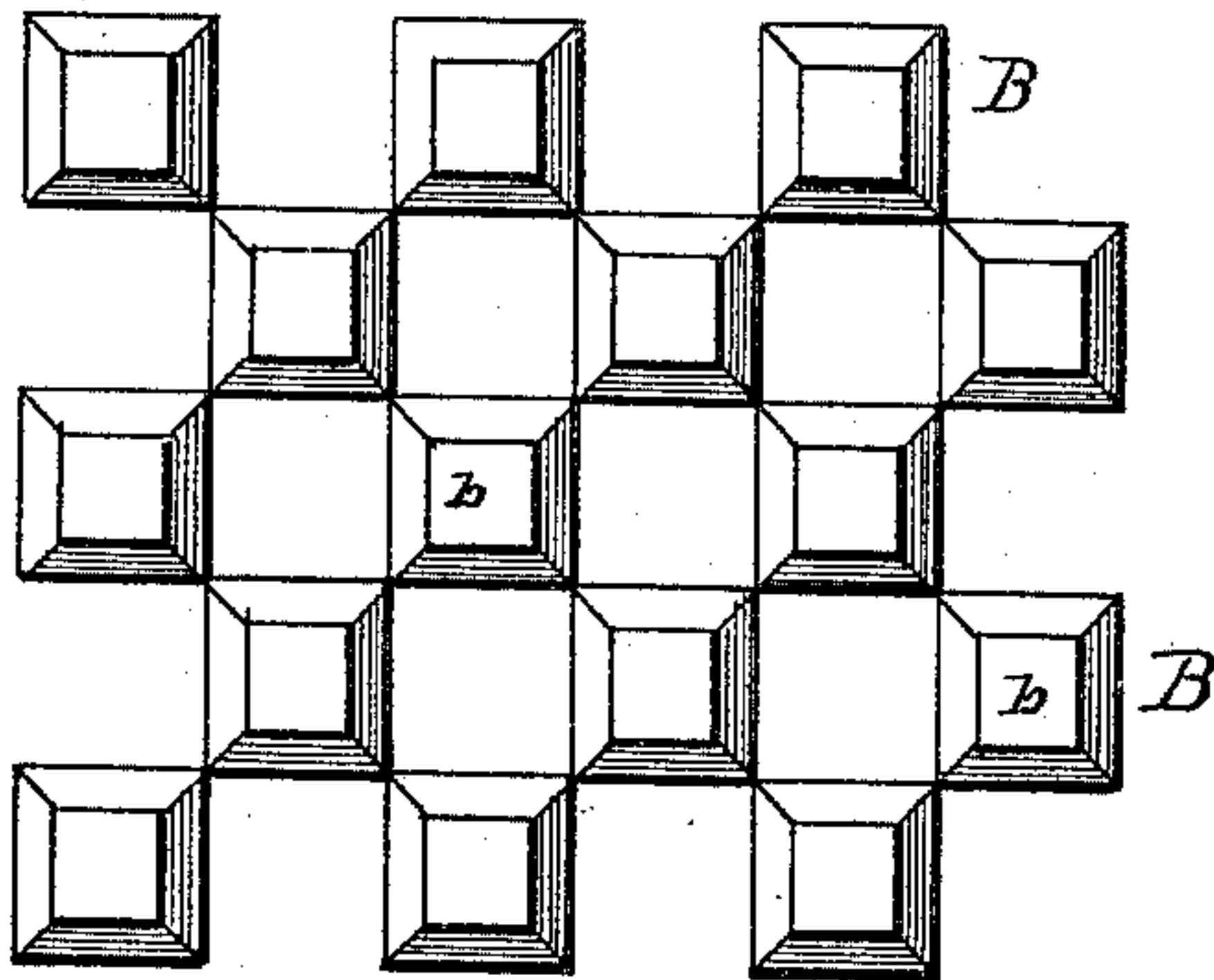


Fig. 2



WITNESSES:

Chas. W. Fleming

Ac. T. Irvine.

Witnessed by  
John W. G. Smith  
per  
Lenox Simpson & Co.

# UNITED STATES PATENT OFFICE.

JOHN W. G. SMITH, OF PITTSBURG, PENNSYLVANIA.

## NAIL.

SPECIFICATION forming part of Letters Patent No. 309,414, dated December 16, 1884.

Application filed March 20, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN W. G. SMITH, of  
Pittsburg, in the county of Allegheny and  
State of Pennsylvania, have invented certain  
5 new and useful Improvements in Nails, of  
which the following is a full, clear, and exact  
description.

The object of my invention is to manufac-  
ture cheap and effective hob-nails; and the in-  
10 vention consists in casting said nails con-  
nected together in a particular way, and in  
the peculiar form of the nail itself.

Heretofore nails have been cast either singly  
or with their heads joined to form a continu-  
15 ous and unbroken sheet. To cast the nails  
singly consumes too much time in forming the  
molds, and to cast them with the heads joined  
in an unbroken and continuous sheet leaves  
the heads when broken apart ragged around  
20 their entire edge, so that considerable labor  
must be expended in finishing up said heads.  
Finally, hob-nails with but a single point  
work out of the leather when the latter has  
been exposed to wear any length of time. To  
25 overcome these difficulties I cast the nails  
with their heads connected together only at  
certain points, leaving nearly the whole of the  
edges free. I thus avoid the necessity of af-  
terward finishing up said edges. I also con-  
30 struct each nail with two points outwardly  
beveled at their ends, so that when driven  
into the leather said points clinch and remain  
firmly embedded.

In the accompanying drawings, Figure 1  
35 represents a perspective view of two rows of  
nails connected to an intermediate gate; Fig.  
2, a top view of several rows of nails connected  
at the extreme corners of the head, and Fig. 3  
a perspective view of a single nail.

40 Similar letters of reference indicate corre-  
sponding parts throughout the different views.

A represents an ordinary gate, connected by  
offsets *a* with the heads of two rows of nails,  
B. Said nails are provided with the ordinary  
thick beveled or conical heads *b*, and have 45  
two points, C. These points are situated at a  
greater or less distance apart, and have their  
extremities beveled outwardly in opposite di-  
rections. The function subserved by the bev-  
eled extremities is to spread the points when 50  
the nail is driven into the leather. In Fig. 2  
the nails are shown cast together without the  
intermediate gate and offsets. This is accom-  
plished by casting said nails with their heads  
connected at the extreme corners. 55

It will be seen that in either of the above  
cases the nails, after being separated, have  
almost the whole of the edges of their heads  
smooth, and consequently require little or no  
60 finishing.

I am aware that hob-nails have been made  
with two shanks to one head; that the shanks  
have been tapered from the head to the point,  
and that they have been cast in sheets or  
groups with the edges or sides of the heads 65  
connected together; but

What I claim as new is—

1. A hob-nail having two opposite shanks  
beveled on the inside of the points in opposite  
directions, whereby said points may be spread 70  
divergently, and thus be tightly held, substan-  
tially as described.

2. A group or sheet of cast hob-nails con-  
nected only at their angular points or corners,  
substantially as and for the purpose specified. 75

JOHN W. G. SMITH.

Witnesses:

J. S. COOK,  
JAMES M. COOK.