

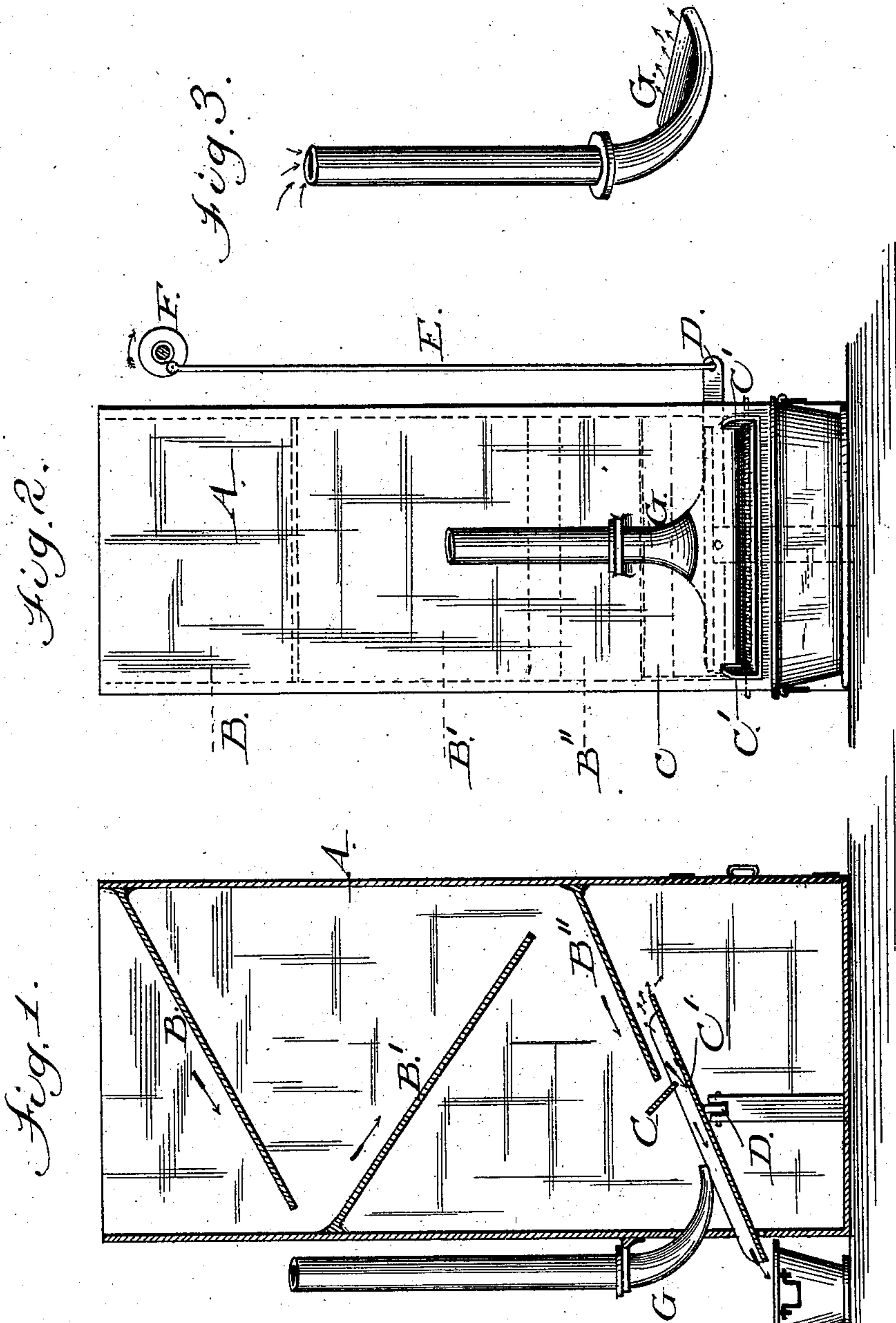
(No Model.)

H. B. CHESS.

DEVICE FOR CLEANING NAILS AND TACKS.

No. 294,440.

Patented Mar. 4, 1884.



Attest;
S. Walter Fowler
R. B. Applewhite,

Inventor;
Harry B. Chess
per atty
A. H. Evans & Co.

UNITED STATES PATENT OFFICE.

HARVEY B. CHESS, OF PITTSBURG, PENNSYLVANIA.

DEVICE FOR CLEANING NAILS AND TACKS.

SPECIFICATION forming part of Letters Patent No. 294,440, dated March 4, 1884.

Application filed October 30, 1883. (No model.)

To all whom it may concern:

Be it known that I, HARVEY B. CHESS, of
Pittsburg, in the county of Allegheny and
State of Pennsylvania, have invented a new
5 and useful Improvement in Apparatus for
Cleaning Nails and Tacks, of which the follow-
ing is a full, clear, and exact description, ref-
erence being had to the accompanying draw-
ings, making a part of this specification, in
10 which—

Figure 1 is a vertical section of a nail and
tack cleaner with my improvements attached.
Fig. 2 is a front elevation of the same. Fig.
3 is a detail to be referred to.

15 My present invention relates to apparatus
for cleaning and separating nails and tacks
and similar articles from scale and other for-
eign substances; and it consists in the combi-
nation of devices hereinafter explained and
20 claimed.

To enable others skilled in the art to make
and use my invention, I will proceed to de-
scribe the exact manner in which I have car-
ried it out.

25 It is peculiarly difficult to separate nails and
tacks from certain materials that become as-
sociated with them during manipulation, es-
pecially during the process of tinning. The
usual appliances leave them after the coating
30 has been accomplished associated with tin-
flakes of all sizes and shapes and every de-
gree of fineness. The object of my present
machine is to remove these foreign substances.

In the drawings, A represents a vertical
35 vessel or chamber, in which are placed sev-
eral inclined planes B B' B'', shown in Fig. 1.
The materials to be cleaned, entering the top
of the vessel A and descending over the slopes
or inclined planes B B' B'', are cooled, and are
40 partially arrested at their fall from plane B''

by a bridge, C, which stops their impetus
downward, and they fall gently into the slop-
ing and vibrating chute C', which is fixed
loosely at its lower end, while the upper end
rests on a transverse bar, D, pivoted at its 4
center, and one end of which is given a limited
but rapid vibrating movement by the pitman
E and crank F, as shown in Fig. 2, and oper-
ated by any of the well-known mechanisms.
The effect of this vibrating motion on the ma- 5
terial is to dance its parts in all positions rela-
tive to a blast of air projected under the regu-
lation of a valve at approximately a horizon-
tal direction from the fan-shaped blast-nozzle
G, as shown in Fig. 3. By this "shaking up," 5
caused by the rapid vibration of the chute and
the inclination of the chute itself, the nails
and tacks acted on move down the slope while
the tin-flakes, danced into favorable positions,
are struck by the blast and blown up the 6
slope, and fall into a chamber in the rear suf-
ficiently open to allow the escape of the blast
while retaining the flakes in the form of dust.

The nails and tacks are received at the bot-
tom of the slope in a vessel, H, prepared for 6
the purpose.

Having thus described my invention, what I
claim as new, and desire to secure by Letters
Patent, is—

In an apparatus for cleaning nails and tacks, 7
the inclined planes B B' B'' and bridge C, in
combination with the vibrating chute C' and
an air-blast nozzle, G, all constructed to op-
erate substantially as and for the purpose de-
scribed.

HARVEY B. CHESS.

Witnesses:

WM. N. EASTON,

THOMAS J. ROGERS.