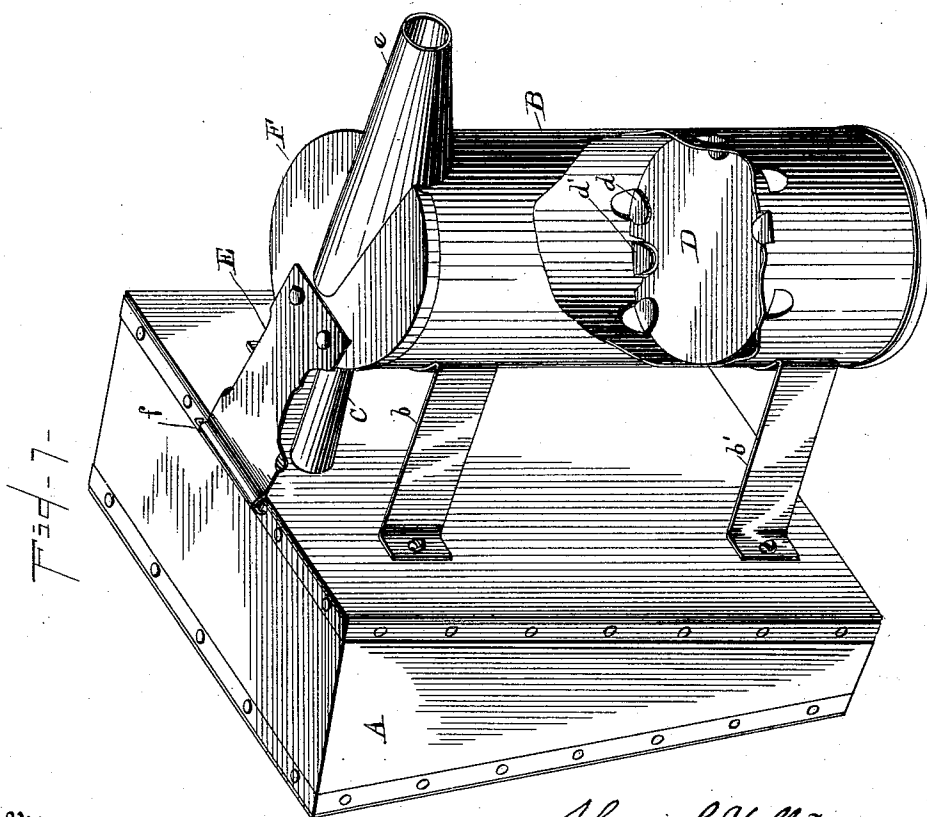
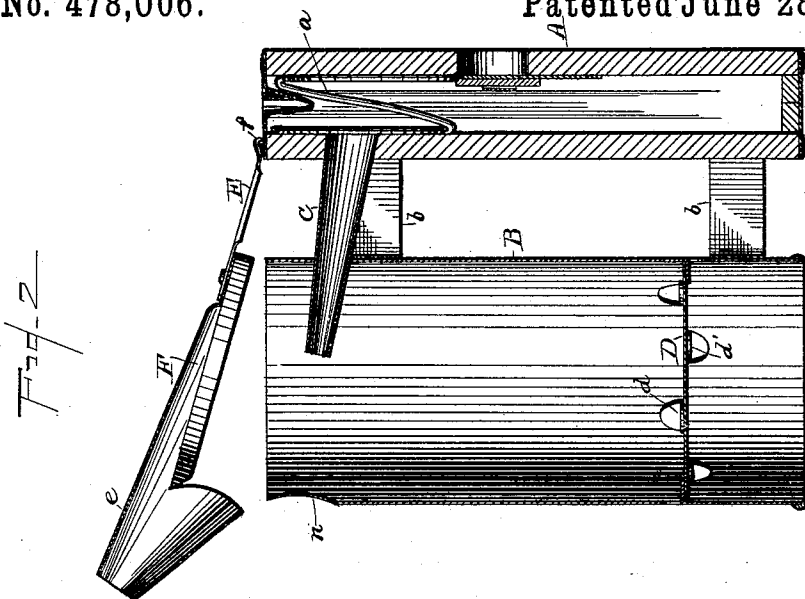


(No Model.)

A. G. HILL.
BEE SMOKING APPARATUS.

No. 478,006.

Patented June 28, 1892.



Witnesses
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UNITED STATES PATENT OFFICE.

ALANSON G. HILL, OF KENDALLVILLE, INDIANA.

BEE-SMOKING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 478,006, dated June 28, 1892.

Application filed September 12, 1891. Serial No. 405,552. (No model.)

To all whom it may concern:

Be it known that I, ALANSON G. HILL, a citizen of the United States, residing at Kendallville, in the county of Noble, in the State of Indiana, have invented certain new and useful Improvements in Bee-Smoking Apparatus; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to improvements in bee-smoking apparatus.

The objects of my improvement are, first, to provide a bee-smoker having a fire-box or cylinder so constructed that the draft-funnel from the bellows enters the cylinder at the top above the flame and in a direct line with the smoke-funnel, instead of at right angles thereto, as heretofore constructed; second, to provide a bee-smoker having a cylinder with a raised or false bottom, proper vents, and an adjustable hinged funnel-top, and so constructed that the fire-cylinder will require no hand-shields and will at all times be in a perpendicular position, whether the smoker is at rest or in use, thereby avoiding the usual derangement of its contents. These objects are attained by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a view of my improvement in elevation, as it appears when in use, with a portion of cylinder B removed, to show raised bottom and perforations. Fig. 2 is a vertical central section of my improvement, showing the arrangement of the raised bottom and the draft-funnel, with the hinged top slightly raised.

Similar letters refer to similar parts throughout the several views.

To the bellows A, Fig. 1, constructed in a well-known manner and operated by a simple wire coil, is secured in a suitable manner the standards *b* and *b'*, to which the fire-box or cylinder B is rigidly attached. The draft-funnel C at its base passes through the top of the bellows A and is properly adjusted

therein, while the other extremity passes into the cylinder B near the top and above the flame, as seen in Fig. 2.

The raised bottom D (seen in Fig. 1) is secured in a well-known manner between the perforations *d* and *d'*, which are alternately above and below bottom D.

The top or lid F, Fig. 1, is secured by a suitable hinge E to the bellows at *f*, and at one extremity is fashioned into a funnel *e*, which fits over the circular opening *n*, which is at or near the top of cylinder B and directly opposite the draft-funnel C, as seen in Fig. 2.

The smoke-funnel *e* of lid F, Fig. 2, may be rigidly adjusted upon the opening *n* and detached from the lid F, though I prefer the construction shown in Fig. 2.

The sectional view of my improvement (seen in Fig. 2) shows the wire coil *a*, by which the bellows A are operated, the draft-funnel C, adjusted in bellows A and entering cylinder B between lid F and standard *b*, the partially-elevated lid F, having a smoke-funnel *e* and hinged at *f*, and constructed to fit over opening *n*, and the raised bottom D, properly adjusted and having suitable perforations *d* and *d'* above and below.

The perforations *d*, above bottom D, supply draft for the flame, while the perforations *d'*, below bottom D, serve to keep that portion of cylinder B below the raised bottom D from becoming overheated, that the smoker when in use may with safety be placed upon the hives or elsewhere without injury.

My improved bee-smoker, as above described, may be constructed of any suitable material, the fire-cylinder being preferably made of sheet metal.

The manner of using my improved smoker is as follows: After starting a fire in the cylinder B with proper fuel the operator works the bellows by the thumb and finger. As my bee-smoker when in use is carried in an upright position and the draft-funnel C enters the fire-cylinder in direct line with the smoke-funnel instead of at right angles thereto, the draft from the bellows will drive the smoke to its work with more directness, increased force, and greater efficiency, while at the same

time, the draft-funnel being above the flames the fuel and ashes will remain undisturbed by the most vigorous operation of the bellows.

My improvement as above described also
5 obviates the necessity for a hand-shield, as the fire-cylinder is on the side of the bellows opposite the operator.

I am aware that prior to my invention bee-smokers have been in use having the smoke-
10 funnel upon one end of the fire-cylinder and at right angles to the draft-funnel; but no bee-smoker has ever been used of which I am aware in which the draft-funnel enters
15 the cylinder above the flame and in direct line with the smoke-funnel, thereby securing to the operator the full force of the draft and enabling him under all circumstances to maintain the cylinder in an upright and proper
20 position, avoiding the usual inversion and derangement of its contents and securing safety and high efficiency in its use.

What I claim, therefore, as my invention, and desire to secure by Letters Patent, is—

1. A bee-smoking apparatus consisting of
25 the cylinder B, provided with a lid F, having a smoke-funnel *e*, and pivoted to the bellows A by the hinge E, a blast-tube C, and a raised

bottom D, secured therein by suitable lugs and having vents *d* and *d'* above and below, all of said parts being adapted to operate in
30 connection with the bellows A, all substantially as set forth and described.

2. In a bee-smoking apparatus, the combination of the stove or fire-cylinder B, having a lid F, having the smoke-funnel *e* hinged or
35 pivoted to bellows A by the hinge E and provided with a raised bottom D, secured therein by suitable lugs cut from the sides thereof, and the blast-tube C with the bellows A, all substantially as described. 40

3. The combination, in a bee-smoking apparatus, of a fire-cylinder B, having a hinged lid F, having the smoke-funnel *e*, an opening
45 *n*, a draft or blast funnel C, and a raised bottom D, secured therein by suitable lugs or ears cut from the sides thereof and having perforations or vents *d* and *d'*, with the bellows A, all substantially as set forth and described.

Signed by me this 26th day of August, 1891.

ALANSON G. HILL.

Witnesses:

G. D. HARDING,

C. L. DECASKEY.