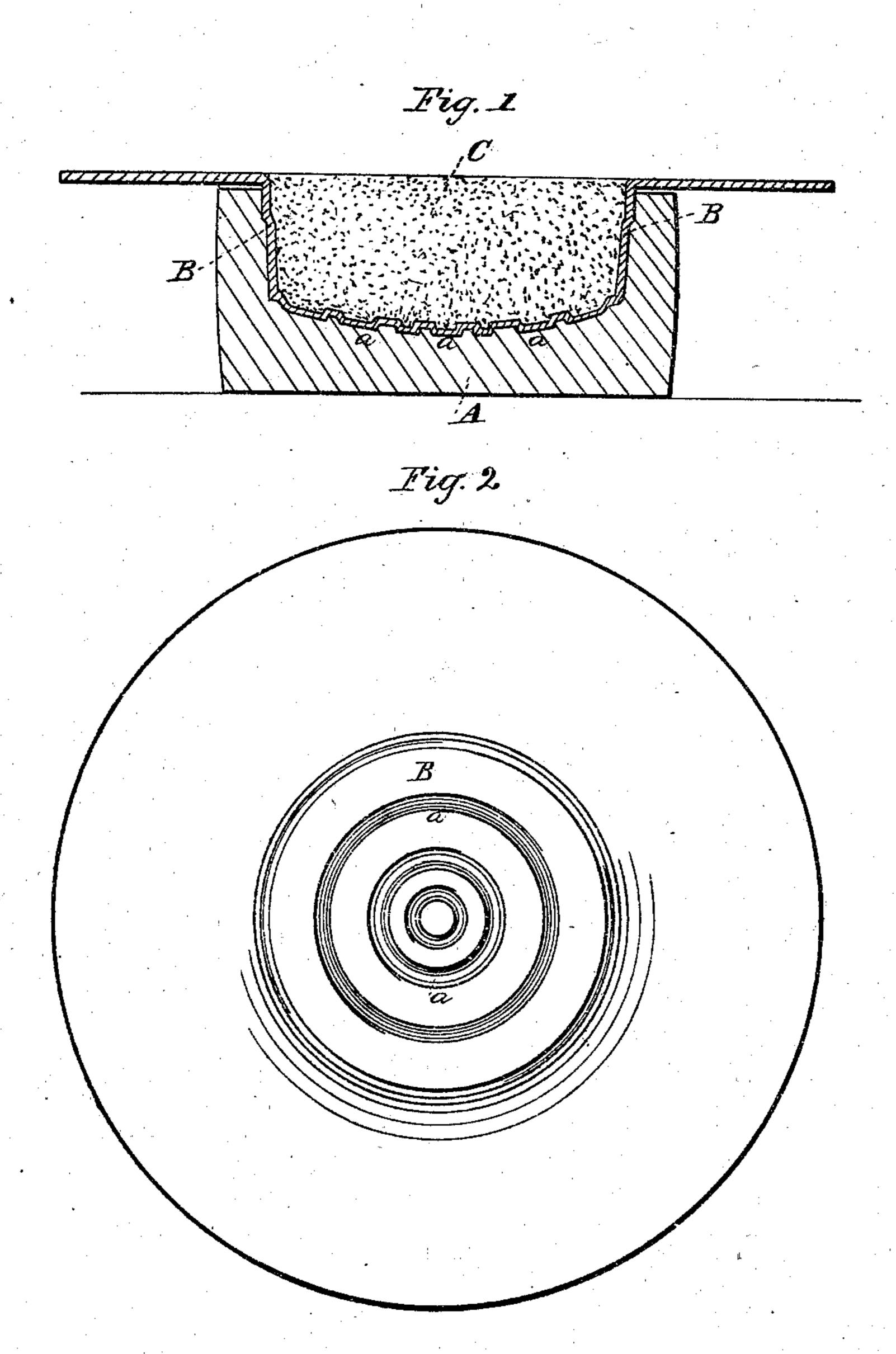
## A. L. BAYLEY. PROCESS FOR EMBOSSING HATS, &c.

No. 31,944.

Patented Apr. 9, 1861.



Witnesses Robonuls R.S. Spenner Triventor. A. S. Bayley for minutly attorneys

## UNITED STATES PATENT OFFICE.

A. L. BAYLEY, OF AMESBURY, MASSACHUSETTS.

SHAPING AND EMBOSSING HATS AND CAPS.

Specification of Letters Patent No. 31,944, dated April 9, 1861.

To all whom it may concern:

Be it known that I, A. L. Bayley, of Amesbury, in the county of Essex and State of Massachusetts, have invented a new and Improved Process for Pressing, Shaping, or Embossing Hats and Caps; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a vertical section of the apparatus by which my invention is performed, and exhibits a hat undergoing the process.

15 Fig. 2 is a top view of a hat which has been

subjected to the process.

My invention consists in shaping or embossing a hat and cap by placing it in a suitably formed shell or concave mold of 20 metal or other suitably hard, strong and smooth substance filling its interior with sand or other granular or pulverous material and subjecting such material to pressure by which means the felt or other fabric of 25 which the hat or cap is composed is driven against or into the figure or figures of the shell or mold and so caused to take a corresponding form.

To enable others to use my invention, I will proceed to describe it with reference to

the drawings.

A, (Fig. 1,) represents the shell or concave mold by which the form or figure of the exterior of the hat or cap is to be produced having its interior made of the requisite form to receive the whole of the hat with the exception of the brim by casting, turning, engraving or any other means. B,

is the hat represented in Fig. 1 as placed in the mold A, and filled with sand C. The 40 sand is represented as placed directly in the hat, as it may be used in that way or be first put in a bag. The pressure may be given to the sand by means of the follower of an ordinary press, and is transmitted by the 45 sand to all parts of the interior of the hat, in such manner as to cause every part of its exterior to be forced out against the opposite interior surface of the mold. The mold represented is for embossing in the form of 50 rings a, a, but any other style of embossing may be produced and a great variety of forms given to the hat by a proper form of the mold. The mold may with advantage be heated by steam or other means and the sand 55 may also be heated.

The use of sand or other granular or pulverous material in the manner described, constitutes a very cheap method of shaping or embossing, as it saves the necessity of an 60 expensively constructed metal die for the interior of the hat or cap, and besides this it is more effective, than such a die would be, as the pressure is transmitted in all directions.

What I claim as my invention, and desire 65

to secure by Letters Patent, is,

The shaping or embossing of hats or caps by placing them in a suitable die A, filling them with sand, or other granular or pulverable material and subjecting such ma- 70 terial to pressure, substantially as herein specified.

A. L. BAYLEY.

Witnesses:

WILLIAM N. HOYT, HORACE S. BAYLEY.