

E. S. Hunt.
Fan.

N^o 84882.

Patented Dec. 15, 1868

Fig. 1.

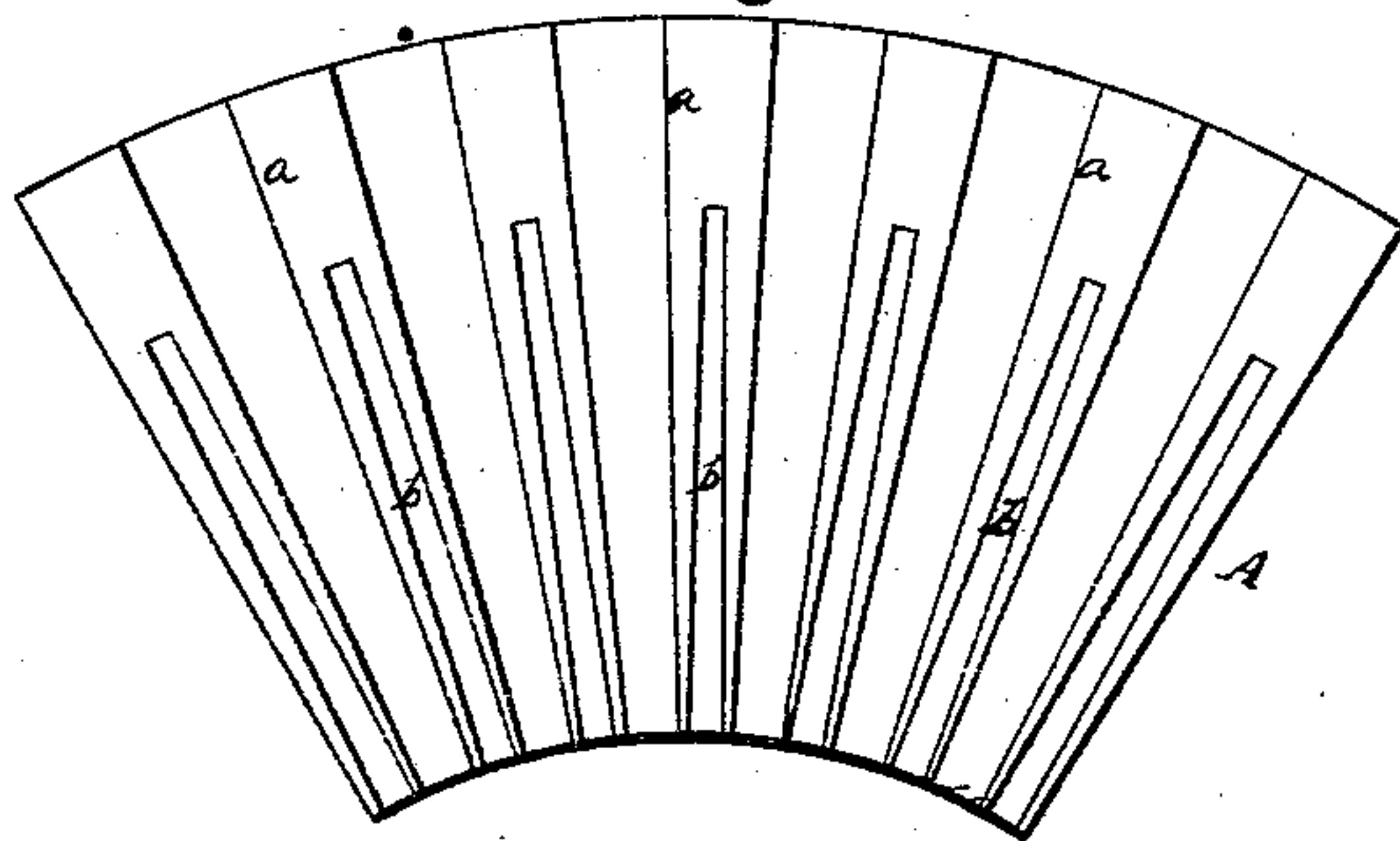


Fig. 2.



Fig. 3.

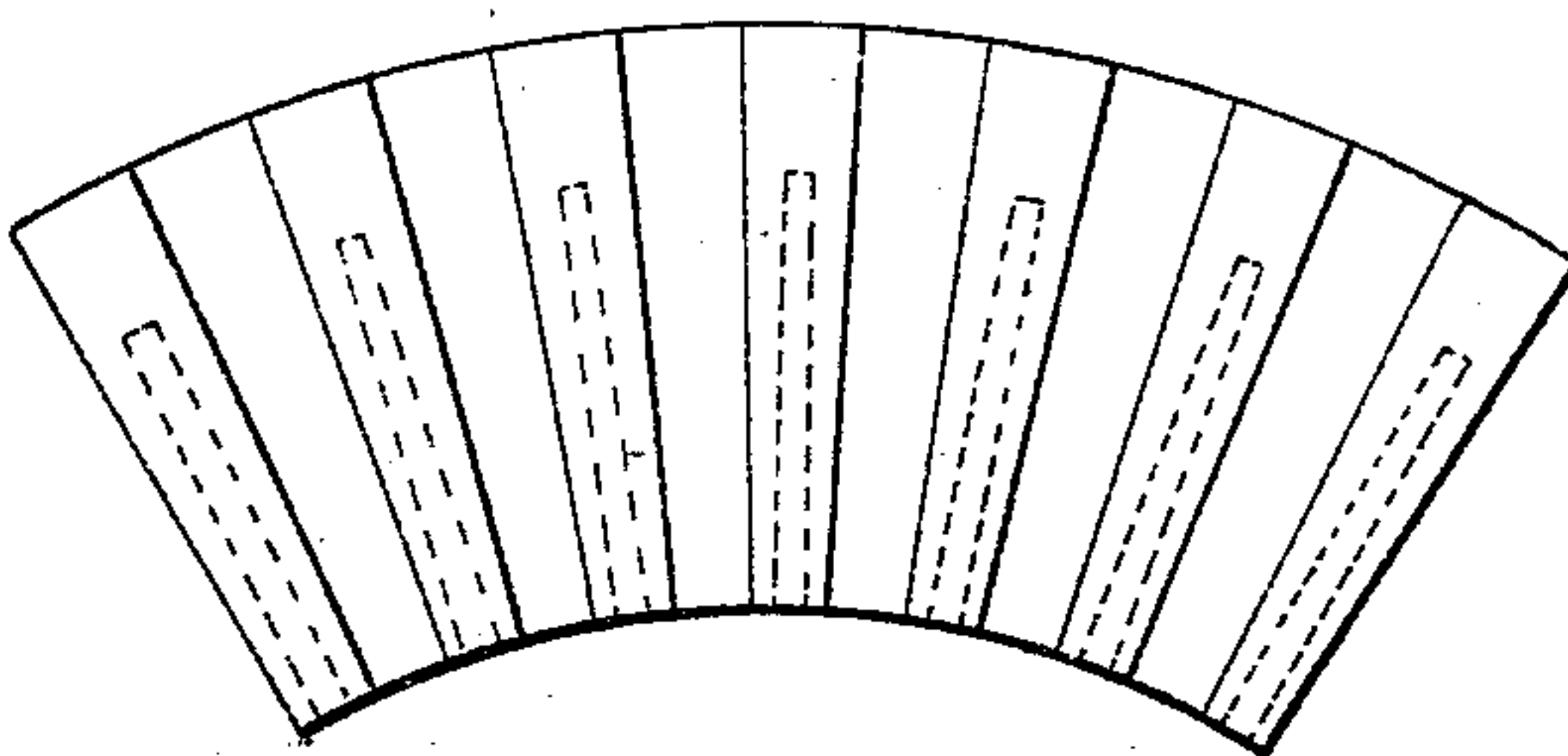


Fig. 4.



Fig. 5.

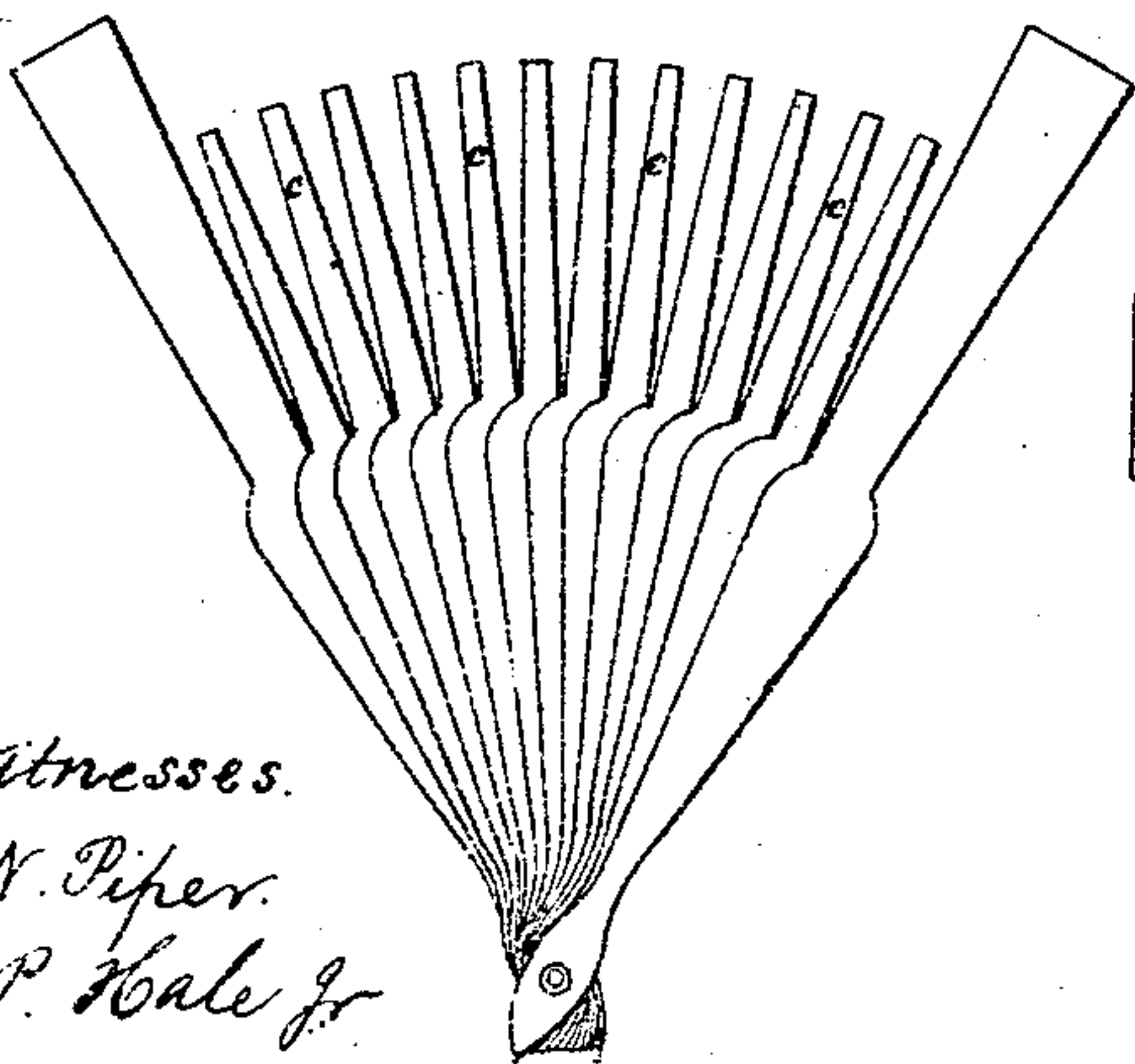
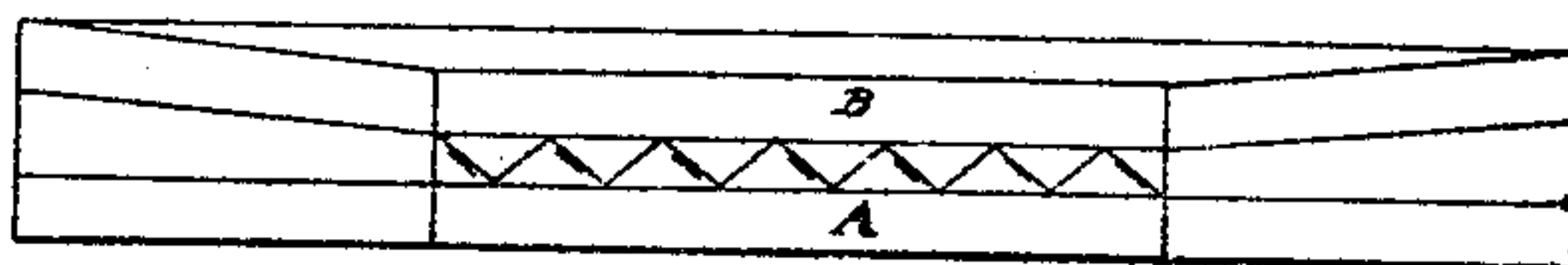


Fig. 6.



Witnesses.
S. N. Piper.
H. P. Hale Jr.

Inventor
Edmund S. Hunt
by his attorney.
R. H. Eddy

United States Patent Office.

EDMUND S. HUNT, OF WEYMOUTH, MASSACHUSETTS.

Letters Patent No. 84,882, dated December 15, 1868.

IMPROVEMENT IN THE MANUFACTURE OF FANS.

The Schedule referred to in these Letters Patent and making part of the same.

To all persons to whom these presents may come:

Be it known that I, EDMUND S. HUNT, of Weymouth, in the county of Norfolk, and State of Massachusetts, have made a new and useful invention having reference to Fan-Dies, and the Making of Fan-Bodies with Spaces or Recesses for Receiving the Fan-Frame Sticks; and I do hereby declare the same to be fully described in the following specification, and represented in the accompanying drawings, of which—

Figure 1 denotes a top view, and

Figure 2, a longitudinal section of the bottom die of a set of dies for crimping the cloth or body of a lady's fan, or preparing it for reception of the sticks of the frame.

Figure 3 is a top view, and

Figure 4, an edge view of the cloth after being stamped by the die, and formed with passages for receiving the inner sticks of a fan, a series or set of fan-sticks, as joined together, being shown in Figure 5.

Figure 6 is an edge view of the two dies.

The body to be applied to or to receive the sticks is usually composed of two layers or strata of cloth or other material, cut of the proper form, one being laid on the other, and connected with it by paste or cement, applied to their inner surfaces, or to that of one of the layers.

The purpose of my invention is to compress the two layers of cloth together, so as to cause them to firmly and evenly unite where cemented, except where it may be desirable to have the sticks go between them; also, at the same time, to corrugate or crimp the body thus formed, so as to enable it to be regularly and properly folded together by the sticks, when they are closed together, or unfolded, when they may be opened apart.

In the drawings, A denotes the bed-die, formed with a series of radial elevations, *a a a*, each being triangular in section, and regularly tapered from its outer to its inner end.

Each of such projections has two upper surfaces or faces, in one of which I form a channel or groove, *b*, to extend from the inner to nearly the outer end of such face.

The fellow or cap-die B, I form the counterpart of the die A, except that its faces may have the grooves in them, or may be without them.

Preparatory to using the dies, we apply to one of the surfaces of one of the pieces of cloth of the fan-body a thin layer of a thin solution of dextrine, and next lay the other piece of cloth on the surface so prepared. The moulds or dies having been heated to or about to the temperature at which a person would heat a flat-iron for the purpose of ironing or smoothing an article of cloth or clothing, the layers of body-cloth are to be interposed between the dies, and the upper die

should next be pressed down upon the cloth, so as to compress it between the two dies. Wherever the two pieces of cloth may have been forced together by the surfaces of the two dies, the cement or dextrine will cause the layers of cloth to adhere to each other, but, where they may be over the grooves of the lower die, they will not adhere together, and thus there will be left between the two layers the spaces or cavities designed to receive the sticks *c c c*. (See fig. 5.) At the same time, the body thus made with stick-recesses will be crimped or corrugated.

When the body is to be composed of a series of separate leaves, one of which is to be applied to each of the sticks, I make each of such leaves in the same manner, with the exception of crimping it, the dies, in such cases, having flat surfaces, either or each being provided with a groove, to prevent adhesion of the two layers of cloth, where it may be desirable to introduce a stick between them.

My invention effects a great improvement in the fabrication of fans.

I would remark that I do not confine it to cloth alone, as the body of the fan to be formed with the stick-recesses may be composed of two or more layers of paper or other suitable material, or one may be of paper, and the other or the rest may be of cloth or other suitable fabric or fabrics.

What I claim as my invention, is—

The method, hereinbefore described, of connecting and compressing together the layers of a fan-body, so as to form them with recesses or pockets, to receive the fan-sticks, as set forth, the same consisting in arranging the layers one on the other, with dextrine or a liquid cement between them, and compressing them together by heated dies, having one or more grooves arranged in either or each of them, so as to prevent adhesion of the layers where it may be desirable, the whole being substantially as described.

Also, the above-described method of connecting and compressing together the layers of a fan-body, so as not only to form them with recesses or pockets between them, to receive the sticks of a fan-frame, but, at the same time, to crimp or corrugate such body, as and for the purpose substantially as specified.

Also, either or both the dies, as formed with grooves, or with grooves and corrugating ridges or projections, for the purpose or purposes, and to operate with respect to the layers of a fan-body, under circumstances and in manner as hereinbefore explained.

EDM'D S. HUNT.

Witnesses:

R. H. EDDY,
J. R. SNOW.