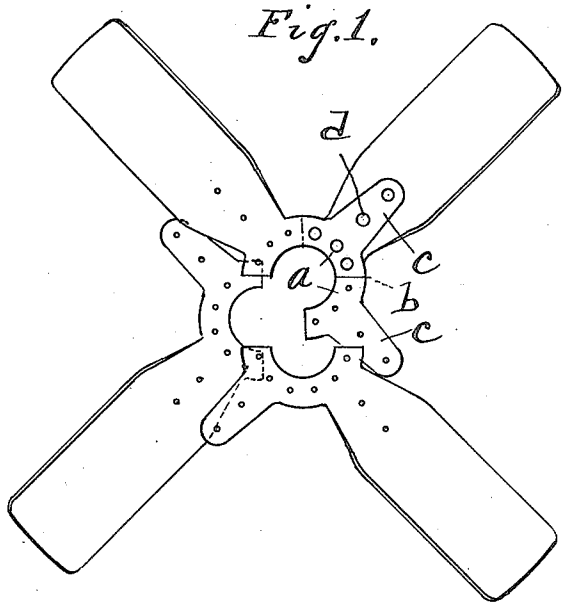
J. A. McINTOSH.

FAN CONSTRUCTION.

APPLICATION FILED APR. 7, 1917.

1,260,562. Patented Mar. 26, 1918.

Fig. 1.



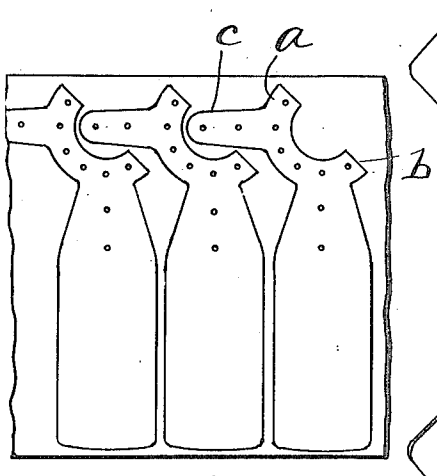


Fig. 3.

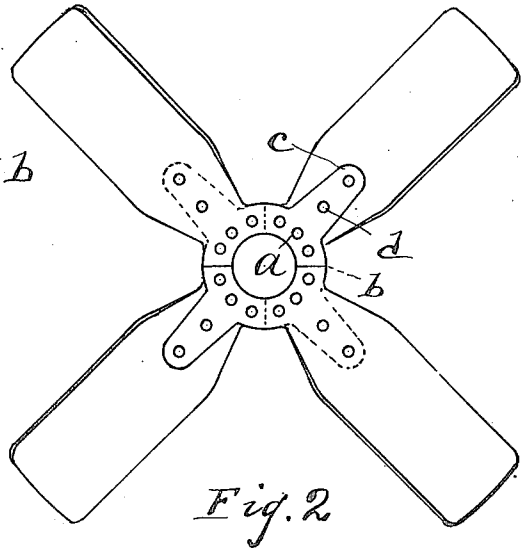


Fig. 2.

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FAN CONSTRUCTION.

1,260,562. Specification of Letters Patent. Patented Mar. 26, 1918.

Application filed April 7, 1917. Serial No. 160,357.

To all whom it may concern:

Be it known that I, JAMES A. McINTOSH, a citizen of the United States, residing at Detroit, county of Wayne, State of Michigan, have invented a certain new and useful Improvement in Fan Construction, and declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to fan construction and has for its object a way of making sheet metal fans from stampings calculated to effect great economy in material.

In the drawings,—

Figure 1 is a view showing how the fan blades are fastened together.

Fig. 2 is a view of the completed fan.

Fig. 3 is a view of the blank showing how the fan blades and the spider are economically cut out of the blank.

Heretofore in the construction of fans great wastage of material has occurred, especially where it is attempted to cut the fan blades and the connecting means between the fan blades out of a single piece of stock.

My invention consists of providing each fan blade with an integral portion *a* of the spider. This comprises a half ring forming in conjunction with the blade roughly a heel *b* and a toe or tongue *c*. Now adverting to Fig. 3, it will be seen that the toe *c* of the spider section fits into the arch between the heel and the toe of the succeeding blade and spider portion so that when the fan sections are stamped out of the blank very little wastage occurs.

As shown in Fig. 1, about half of the spider section can be made to overlap half of the spider section of the succeeding blade and a portion of the blade itself. These overlapped portions may be riveted or spot-welded together as at *d* so as to practically make them an integral structure. Similarly the other two sections may be fastened to each other and to the aforesaid sections forming a complete fan as shown in Fig. 2.

What I claim is:

1. A fan made up of a plurality of blades having continuations in the form of L-shaped half rings and tongues, and means for securing these half rings, tongues and blades in overlapped relation to form a complete fan.

2. A fan comprising blades and continuations in the form of half rings having, roughly, a heel and a projecting toe extending to one side of the axis of each blade, and means for securing said continuations and blades together.

3. A fan comprising a plurality of blades, each blade having an integral continuation in the form of a segment provided with a projecting tongue, the said projecting tongue adapted to reach to the succeeding blade to which it is secured.

In testimony whereof, I sign this specification.

JAMES A. McINTOSH.