I. H. LESEM.

FAN.

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Fig. 1.

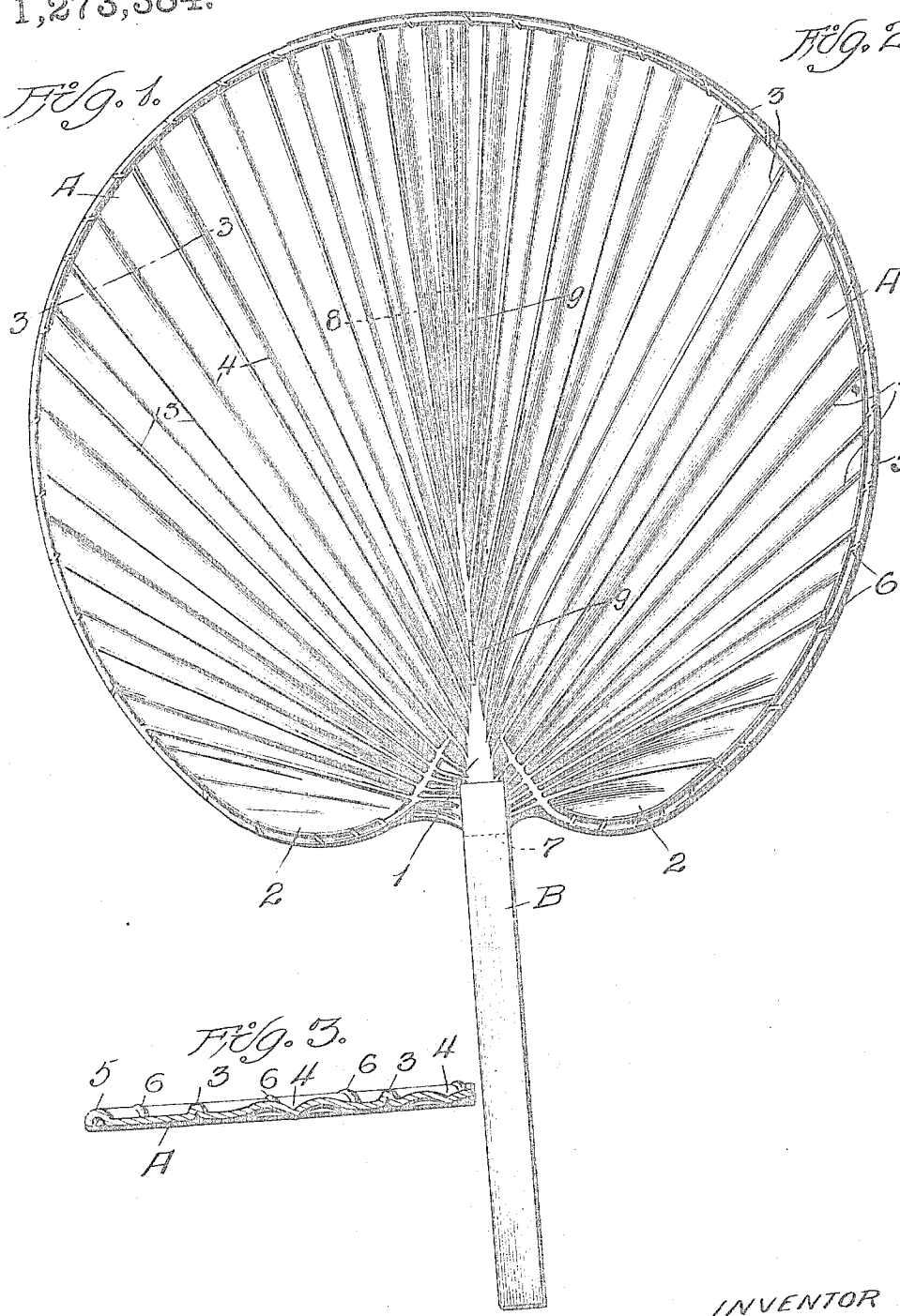


Fig. 2.

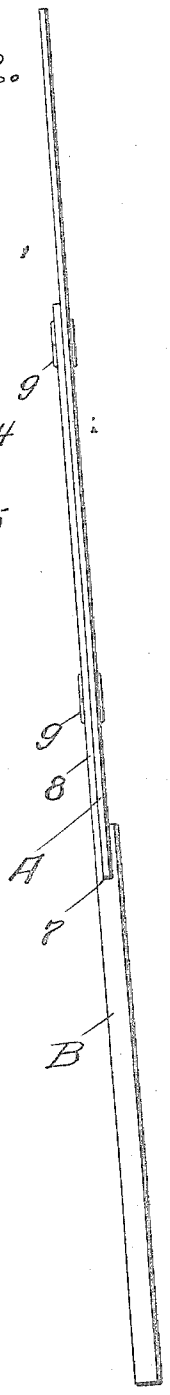


Fig. 3.

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FAN.

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To all whom it may concern:

Be it known that I, ISAAC H. LESEM, a citizen of the United States, residing at the city of St. Louis, State of Missouri, have invented a certain new and useful Fan, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof.

This invention relates generally to fans and, more particularly, to a certain new and useful artificial palm-leaf fan, the object of my invention being to provide, as a new article of manufacture and as an efficient substitute for the natural palm-leaf fan, an inexpensive artificial or factitious palm-leaf fan having a body or blade of fabricated compressed sheet material bodily shaped and configured in approximate similitude of the natural palm-leaf fan.

With the above object in view, my invention resides in the novel form and construction of the fan, all as will hereinafter be described and afterward pointed out in the claims.

In the accompanying drawings,

Figure 1 is an elevational view of a fan embodying my invention;

Fig. 2 is an edge view of the fan; and

Fig. 3 is an enlarged fragmental sectional view through the fan on approximately the line 3—3, Fig. 1.

Referring to the said drawings, in which like reference characters refer to like parts throughout the several views, my new fan has a body or blade A constructed of suitable and more or less readily obtainable fabricated compressed sheet material, such as sized paper-board; and this body A, by embossment thereof in similitude of the natural dried palm-leaf, closely, approximately exactly, resembles in the finished artificial fan the body or blade of the natural dried palm-leaf. Carrying out such similitude, the body A includes a midrib or petiole 1, which, as shown and as characteristic of the midrib or petiole of the natural palm-leaf, attenuates from the base and disappears toward the apex of the blade or body A. The midrib or petiole 1 is also flattened as illustrated to correspond or conform to the flattened midrib or petiole of the natural dried and pressed leaf. In contour, the body or blade A is substantially circular to conform to the usual contour of the blade of the natural palm-leaf fan, and at its base, on each side of the midrib or petiole 1, it is formed on a less and substantially compound curve, to form lobes 2 corresponding or conforming to the lobes of the natural leaf. In simulation of the fibro-vascular bundles or veins of the natural palm-leaf, are ribs 3, which diverge radially in more or less straight lines from successive points along the opposite sides of the midrib or petiole 1 from its base to its apex and extend or run to near the margin of the blade; and in resemblance to the midrib or petiole and ribs of the natural palm-leaf fan, the petiole 1 and ribs 3 are in relief with respect to one or the front face of the blade or body A, the rear face of the blade A presenting creases and ribs in reverse to the ribs and creases or depressions and grooves, respectively, on the front face of the blade, as seen in Fig. 3. Intermediate the several ribs 3, the blade A is formed on its front face with grooves or creases 4, which, as with the ribs 3, diverge radially in more or less straight lines from successive points along the opposite sides of the midrib or petiole 1 from its base to its apex and extend or run nearly to the margin of the blade. The said ribs and grooves as they approach the center of the blade merge toward the center of the blade, the midrib disappearing in the merging ribs and grooves, and the portions of the blade A between the several ribs 3 and grooves 4 are waved or undulated, as seen particularly in Fig. 3, all in similitude of the creased and curled appearance of the tissue of the dried natural palm-leaf.

To additionally conform to the natural palm-leaf and in simulation of the marginal binding or reinforcing strip common to natural palm-leaf fans, the body or blade A is formed with a marginal rib 5, which extends in relief with respect to the front face of body A entirely therearound from points at the base of the blade A spaced somewhat laterally from the midrib 1, the rib 5 from said points extending toward the midrib or petiole 1 in the direction of its attenuation and intersecting or transversely piercing the radial ribs 3 to within a short distance of the midrib, to conform to the usual arrangement and appearance of the ends of the marginal binding strip as used in constructing fans from the natural palm-leaf.

To further the resemblance between the rib 5 and the usual marginal binding strip of the natural palm-leaf fan, the blade or body A is formed at its margin with a series of what I might call bosses 6, which extend at an angle or obliquely across the marginal rib 5, in similitude of the thread-stitches usually employed in attaching the marginal binding strip in the natural palm-leaf fan.

The blade A is seated at the outer end of its midrib or petiole 1 in a kerf 7 provided transversely in the upper end of a suitable preferably light wooden handle B, which is integrally projected above the kerf 7 to provide an extension 8 adapted to extend lengthwise along the rear face of, and thereby reinforce, the blade A, the handle B being secured to the blade A in any convenient manner, as by means of the staples 9 projected through the blade A and the handle-extension 8, as seen especially in Fig. 2. The handle B is preferably of a length to include only its kerf 7, whereby substantially the whole of the front face of the blade A is exposed. I prefer to construct the blade A of paper-board commercially known as "sized stock," and I have found that six-ply paper-board, properly sized, is of ample weight, when ribbed and grooved as I have described in similitude of the natural leaf, to provide an artificial palm-leaf blade A of sufficient stiffness and strength for durability. By reason of this economic expedient, however, I find it better, for the durability of the fan, to employ the added handle B than to extend the midrib 1 into a stem, as in the natural leaf; yet it will be evident that, if a heavier stock were employed to construct the blade A, the handle might be formed as an integral part thereof.

The blade A especially of the fan is preferably constructed of material of a color in similitude of the color of the natural palm-leaf fan, and to that end I resort to the use of a suitable dye either in the manufacture of the stock or as a moistening medium for the stock in the production of the artificial palm-leaf blade A.

Not only do the ribs and grooves which I have described so configure the body A to resemble the blade of the natural palm-leaf fan, but they also perform the important mechanical function of stiffening and reinforcing the blade A, the material of which is more or less flexible, as is the natural palm leaf. The rib 5, which is substantially circular and located at and around the margin of the body A, serves to absorb shocks or blows delivered at the margin of the blade and thus breakage from strains diametrically of the blade is minimized, while the radial ribs 3 and grooves 4, which latter form ribs on the rear face of the blade, as seen in Fig. 3, stiffen the body inside the marginal rib 5 and in a manner to minimize distortion or breakage by strains delivered to the blade through the handle either by accident or improper use.

Thus I provide inexpensively a durable fan having the appearance and all the characteristics of, and efficiently usable as a substitute for, the natural palm-leaf fan, but which will better withstand the effects of climatic and atmospheric conditions than the natural palm-leaf fans, which become cracked or split and broken from the effects of climatic and atmospheric conditions and usage, due to their brittleness after the drying process. This characteristic of the fan herein described is due to the fact, as above stated, that the blade may be constructed of sized and practically water and moisture proof material, and for this purpose the blade may be constructed of any suitable water and moisture proof material capable of being pressed to shape between dies.

Having thus described my invention, what I claim and desire to secure by Letter Patent is:

1. As an article of manufacture, a toilet fan simulating a natural palm-leaf fan, the blade of which consists of a plate constructed of a sheet of fabricated compressible material and provided with an integral midrib, and a series of integral diverging substantially straight alternating ribs and creases radiating from successive points along the opposite edges of the midrib and extending toward the margin of the blade.

2. As an article of manufacture, a toilet fan simulating a natural palm-leaf fan, the blade of which consists of a substantially circular plate constructed of a sheet of fabricated compressible material and provided with an integral midrib tapering from its base and merging into the blade toward the center thereof, and a series of integral diverging substantially straight alternating ribs and creases radiating from successive points along the opposite edges of the midrib from its base to its point of mergence and extending toward the margin of the blade.

3. As an article of manufacture, a toilet fan simulating a natural palm-leaf fan, the blade of which consists of a substantially circular plate constructed of a sheet of fabricated compressible material and provided with an integral midrib tapering from its base and merging into the body of the blade toward the center thereof, a series of integral diverging substantially straight alternating ribs and creases radiating from successive points along the opposite edges of the midrib from its base to its point of mergence and extending toward the margin of the blade, and a marginal rib extending around substantially the entire blade.

4. As an article of manufacture, a toilet fan simulating a natural palm-leaf fan,

the blade of which consists of a substantially circular plate constructed of a sheet of fabricated compressible material and provided with an integral midrib tapering from its base and merging into the body of the blade toward the center thereof, a series of integral diverging substantially straight alternating ribs and creases radiating from successive points along the opposite edges of the midrib from its base to its point of mergence and extending toward the margin of the blade, a marginal rib extending around substantially the entire blade, and a series of spaced bosses diagonally arranged across said marginal rib.

5. As an article of manufacture, a toilet fan simulating a natural palm-leaf fan, the blade of which consists of a substantially circular plate constructed of a sheet of fabricated compressible material and provided with an integral midrib tapering from its base and merging into the body of the blade toward the center thereof, a series of integral diverging substantially straight alternating ribs and creases radiating from successive points along the opposite edges of the midrib from its base to its point of mergence and extending toward the margin of the blade, and an integral marginal rib extending around substantially the entire blade and terminating in the body of the blade upon opposite sides of the midrib and intersecting some of the ribs and creases radiating therefrom.

6. As an article of manufacture, a toilet fan simulating a natural palm-leaf fan, the blade of which consists of a substantially circular plate constructed of a sheet of fabricated compressible material and provided on one of its faces with an integral midrib tapering from its base and merging into the body of the blade toward the center thereof, a series of integral diverging substantially straight alternating ribs and creases radiating from successive points along the opposite sides of the midrib from its base to its point of mergence and extending toward the margin of the blade, an integral marginal rib extending around substantially the entire blade and terminating in the body of the blade upon opposite sides of the midrib and intersecting some of the ribs and creases radiating therefrom, and a series of spaced bosses diagonally arranged across said marginal rib, the opposite face of the blade presenting creases, ribs, and depressions in reverse to the ribs, creases, and bosses, respectively, on the first-mentioned face of the blade

In testimony whereof, I have signed my name to this specification.

ISAAC H. LESEM.