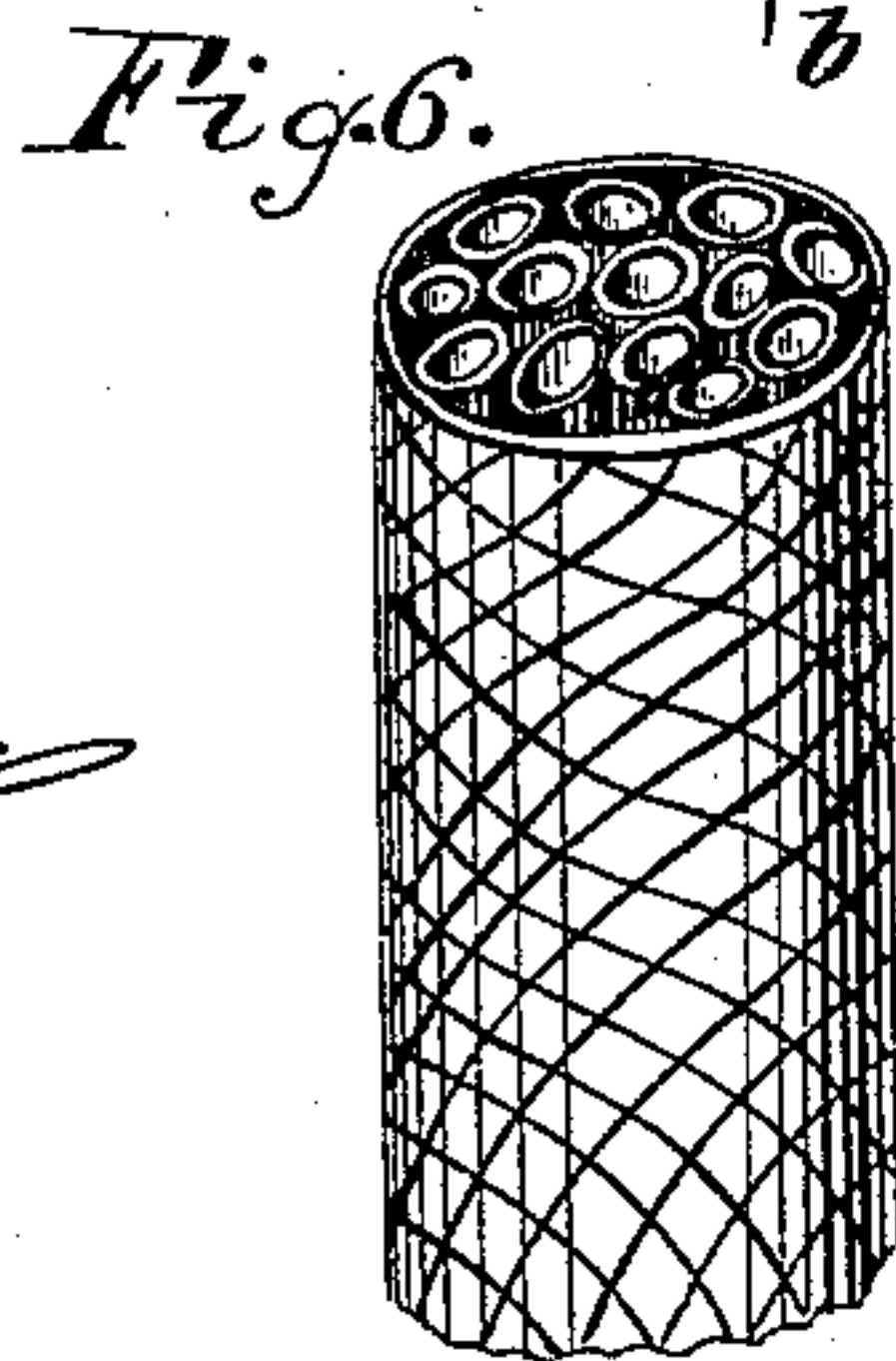
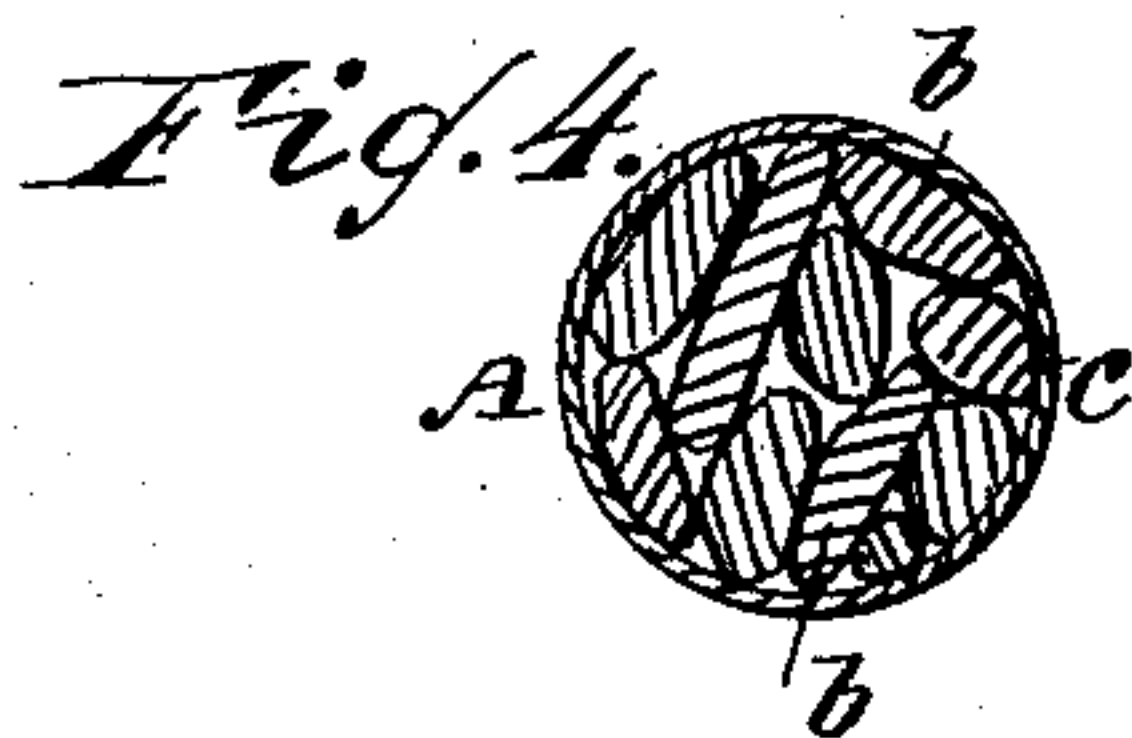
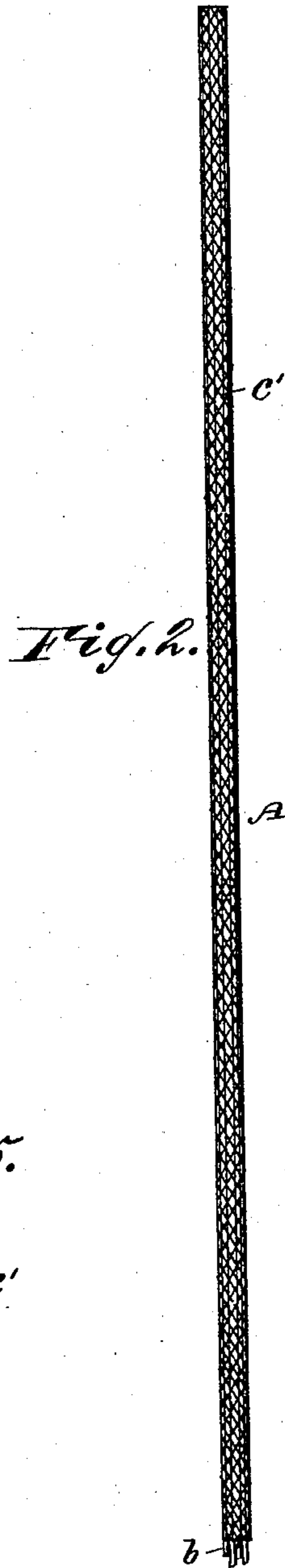
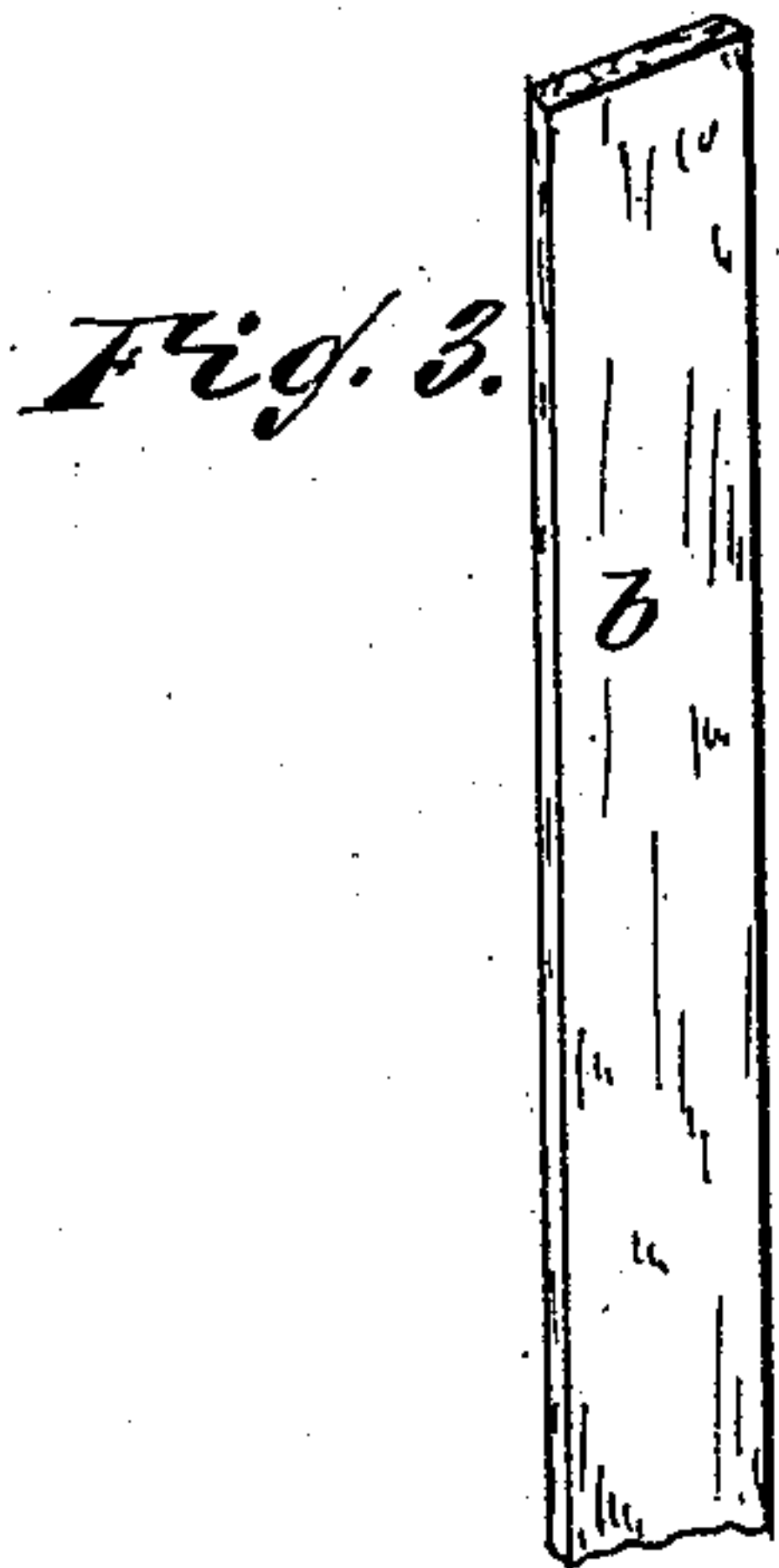
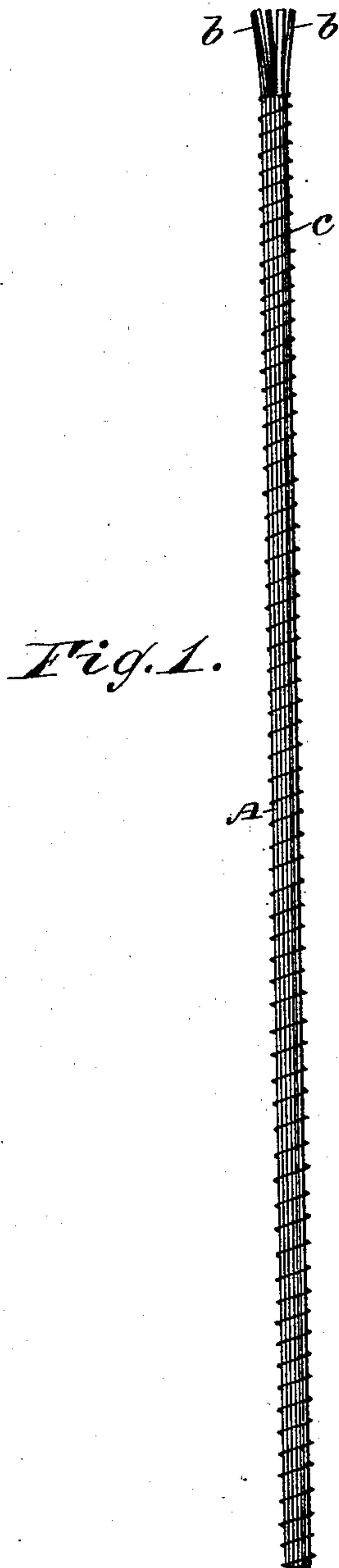


(Model.)

E. K. WARREN.
CORSET STIFFENER.

No. 286,749.

Patented Oct. 16, 1883.



WITNESSES:

Theo. G. Foster.
C. Sedgwick

INVENTOR:

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BY

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ATTORNEYS.

UNITED STATES PATENT OFFICE.

EDWARD K. WARREN, OF THREE OAKS, MICHIGAN, ASSIGNOR OF ONE-HALF
TO GEORGE R. HOLDEN, OF MICHIGAN CITY, INDIANA.

CORSET-STIFFENER.

SPECIFICATION forming part of Letters Patent No. 286,749, dated October 16, 1883.

Application filed January 9, 1883. (No model.)

To all whom it may concern:

Be it known that I, EDWARD K. WARREN, of Three Oaks, in the county of Berrien and State of Michigan, have invented certain new and useful Improvements in Corset-Stiffeners, of which the following is a full, clear, and exact description.

This invention has for its object the utilization as a rib or stiffener for corsets and other articles of dress or fabrics of the stalks, stems, or quill portions of feathers after they have been stripped—as, for instance, the feathers of turkeys, geese, chickens, and other fowls—much of which kind of stock has heretofore had little or no commercial value. These I propose to use, among other purposes or uses, as a substitute for whalebone in corsets, waists, dresses, abdominal supporters, surgical appliances, and other articles of wear and use. The growing scarcity and increased cost of whalebone for these and other purposes has led to the employment of various substitutes, including bones, horn, rubber, steel, and rattan; also, the fibers of tampico held together by an exterior binding—as, for instance, by a wrapping of wire or thread. Many of these are expensive and much inferior in numerous respects to whalebone. My improved bone or rib, which I term “featherbone,” has many advantages, and the same may be made to form a compact stay or bone, which in some respects is better and has more enduring elasticity than whalebone, as it is not so liable to break or warp, nor will it be injured by perspiration or boiling water in washing. Such elastic substitute for whalebone I generally propose to make by splitting or otherwise reducing, either by hand or machinery, but preferably by machinery, the quills into splints. These splints or fibers may be held together by any suitable external binding. Thus I wrap them with either wire or thread by winding, braiding, twisting, or they may be cemented or be otherwise put up together to form a featherbone of any desired shape in its transverse section, and may either be simply inserted in the article to which they are applied or be woven therein, or they may be woven together, so as to form an elastic or flexible fabric.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 represents an exterior longitudinal view of a featherbone in which a number of quill splints are held together by winding a wire or thread around them. Fig. 2 is a similar view of a number of quill splints held together by a woven covering. Fig. 3 is a view in perspective, upon an enlarged scale, of a portion of one of the quill splints detached; and Fig. 4 is a cross-section of Fig. 1, and Fig. 5 a cross-section of Fig. 2, both being on an enlarged scale. Fig. 6 is a perspective view of a stiffener made of the entire quills in a suitable wrapper.

In the drawings, *b b* represent a number of split-quill splints arranged longitudinally together in any suitable manner to form a featherbone, *A*, of any desired form in its transverse section, and which may be held together either by a wound wire or thread external binding, *c*, as in Figs. 1 and 4, or by a woven external covering, *c'*, as in Figs. 2 and 5, or which may be otherwise held together, as hereinbefore specified.

By using the separated fibers or splints of the stripped quills or stems of feathers, produced by splitting or disintegrating them, the resiliency of the quills is preserved without exposing them to breakage in bending, to which they would be more or less liable if used in their entire form. However, the entire quills make a very good stiffener when stripped and bound together, as shown in Fig. 6 of the drawings.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

A corset-stiffener formed of quills or quill splints stripped of the feathers and bound together, as shown and described.

EDWARD KIRK WARREN.

Witnesses:

HENRY A. McCANN,
RETTA HOLLETT.