

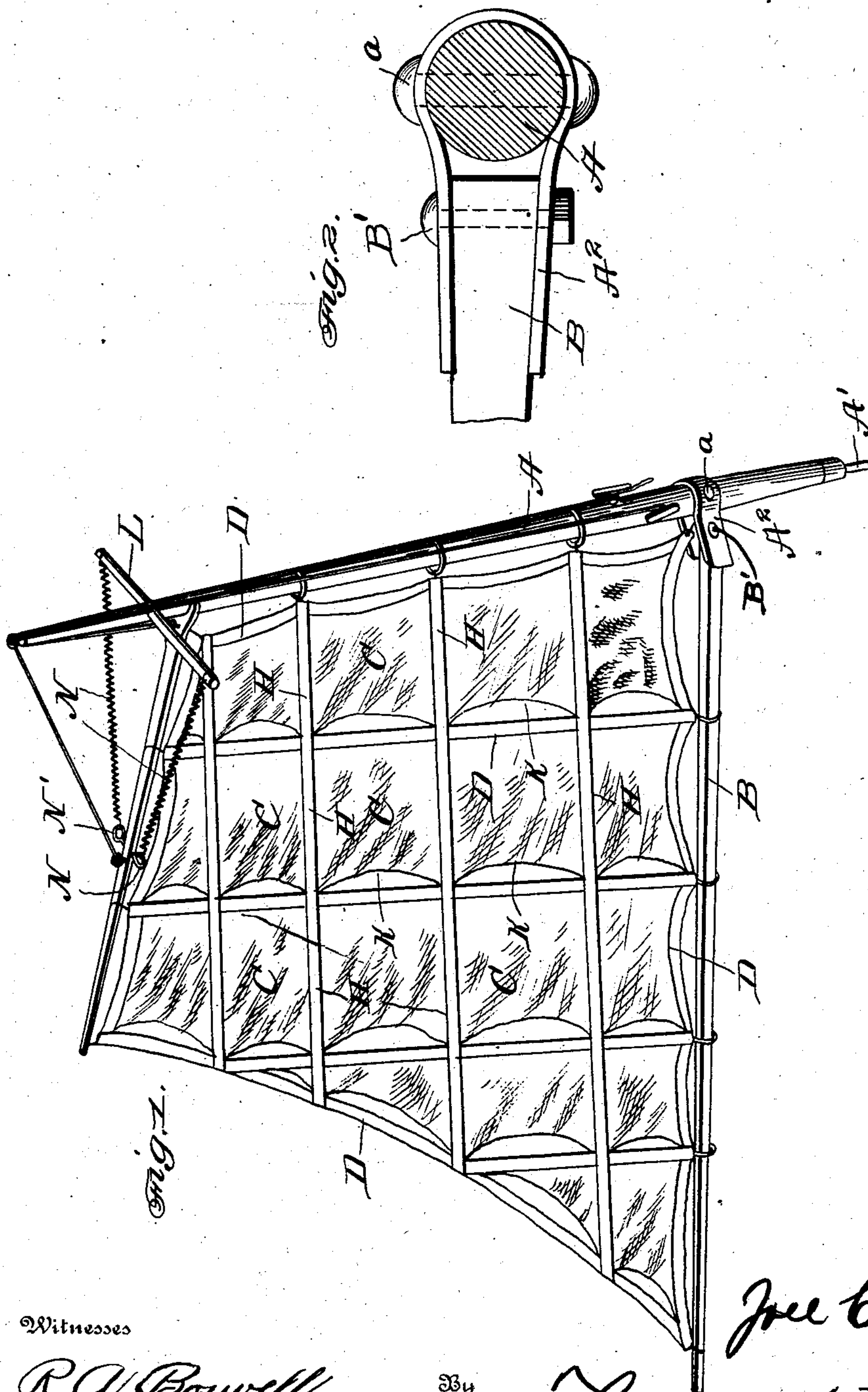
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J. COUCH.
SAIL.

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NO MODEL.



Witnesses

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SPECIFICATION forming part of Letters Patent No. 721,286, dated February 24, 1903.

Application filed December 15, 1902. Serial No. 135,358. (No model.)

To all whom it may concern:

Be it known that I, JOEL COUCH, a citizen of the United States, residing at Clayton, in the county of Jefferson and State of New York, have invented certain new and useful Improvements in Sails; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in sails for boats; and it consists in the provision of a series of sections which are connected together and having corresponding ends left free or open and somewhat baggy to give the sail more driving power and in the provision of springs or other elastic material connecting the gaff with the mast, whereby the former may be allowed to sway when a strong puff of wind strikes the sail, thereby relieving the sail and holding same firmly against the wind.

The invention consists, further, in the provision of a sectional sail connected to a boom, mast, and gaff, said boom being hinged to a yoke secured to the mast, whereby the boom and mast are caused to rotate together or rock on the lower pivotal end of the mast.

The invention consists, further, in the novel construction, combination, and adaptation of parts, as will be hereinafter more fully described in detail and then illustrated in the accompanying drawings.

My invention is clearly illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of my improved sail; and Fig. 2 is a cross-section of a mast, showing boom connection in plan.

Reference now being had to the details of the drawings by letter, A designates the mast of the sail, having a pivotal pin A' at its lower end, and A² is a band or yoke which passes about the mast and is securely fastened thereto by means of a bolt *a*. The boom B is pivotally mounted on a pin B', which is held in apertures in the ends of said yoke, as shown.

The sail proper is made up of a series of sections C, which are connected at corresponding ends to vertically-disposed ropes or

tapes D, which extend between the gaff and boom. The opposite longitudinal edges of each section of the sail are connected to the marginal edges of pockets H intermediate the sections, which pockets are adapted to receive stiffening-strips of any suitable material, which are held parallel to each other and to the boom. The free edge of each section (designated by letter K) allows an open space intermediate the free end of the section and the adjacent end of another section, which is fastened to a rope or tape D. Each free end of a sail-section is left baggy, as illustrated, in order to give more drive or push to the sail, the open spaces between the sections being provided for the purpose of allowing the sail to be instantly relieved of dead wind.

Fastened to the cross-bar L, which is supported by the mast, are the springs N, connected at corresponding ends to the gaff at points N'. These springs are provided for the purpose of allowing the sail to give slightly under excessive pressure and to hold the sail against the wind.

From the foregoing it will be observed that by the provision of a sail made in accordance with my invention the sections will be relieved instantly of dead wind and the sail will move with the mast, the gaff allowed to yield, and same kept parallel under normal conditions with the boom. A sail as described is more durable than the ordinary sail made up of a single piece of canvas and has more driving power, as the free ends of the sections being wider than their other ends will sag when the wind strikes same.

Having thus described my invention, what I claim to be new, and desire to secure by Letters Patent, is—

1. A sail made up of a series of sections, each of which has a free baggy edge intersecting pockets to which the fixed edges of the sections are connected, a rotatable mast, a boom to which said sail-sections are connected, and which boom is mounted to move with the mast, as set forth.

2. A sail made up of a series of sections, each of which has a free edge which is wider than its opposite fixed end, a rotatable mast, a yoke secured thereto, and a boom to which said sail-sections are connected, said boom being pivotally connected to said yoke, and

a gaff having yielding connections with said mast, as set forth.

3. A sail made up of a series of sections each section having a corresponding free
5 baggy end, a mast to which the sections are fastened, a boom, a yoke fastened to the mast and to which yoke one end of the boom is pivotally connected, a cross-piece secured to

the mast, a gaff, and springs connecting same with said cross-piece, as set forth. 10

In testimony whereof I hereunto affix my signature in presence of two witnesses.

JOEL COUCH.

Witnesses:

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