

(No Model.)

H. W. TIMMONS.
BUGGY TOP.

No. 429,822.

Patented June 10, 1890.

Fig. 1.

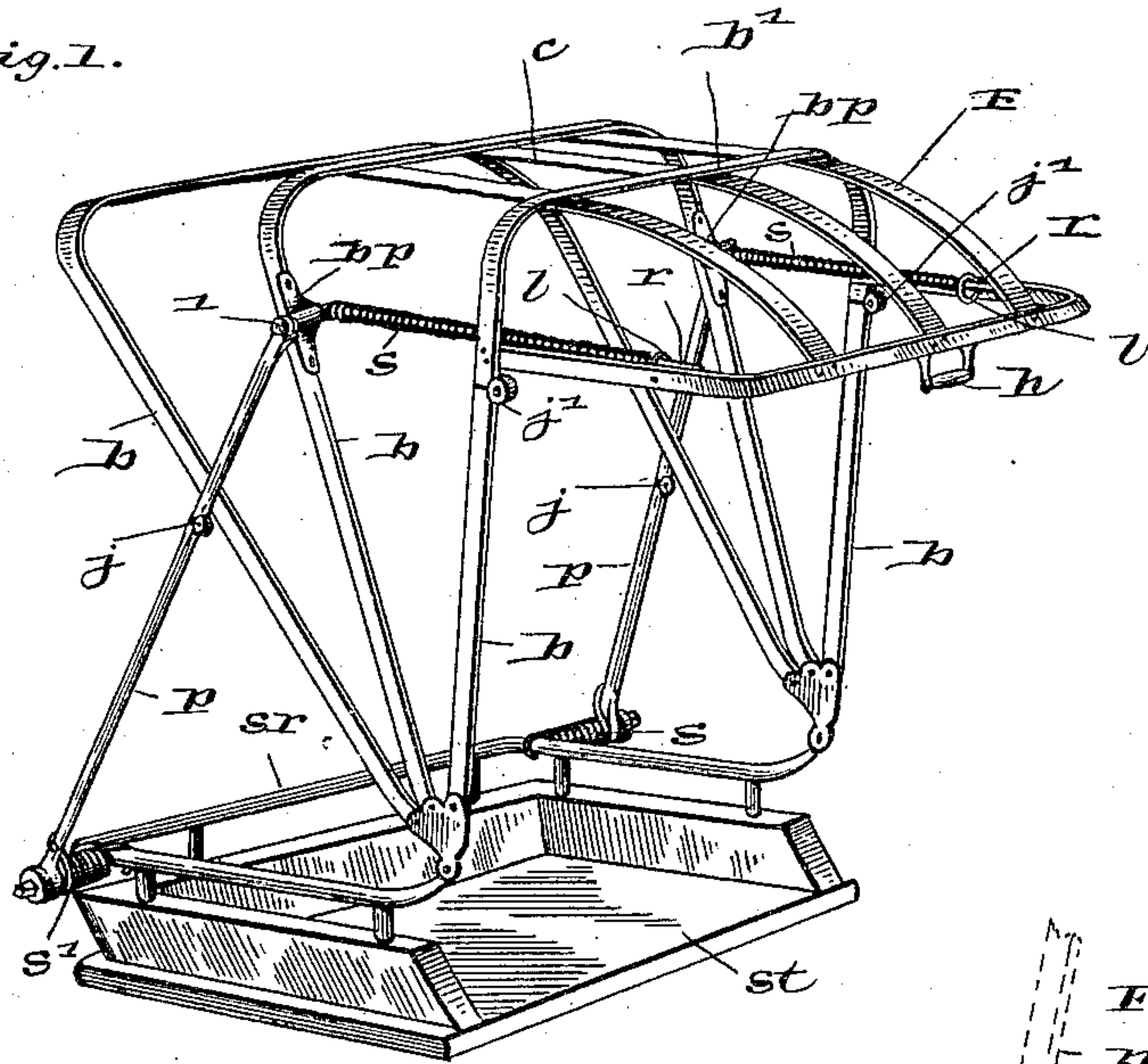


Fig. 2.

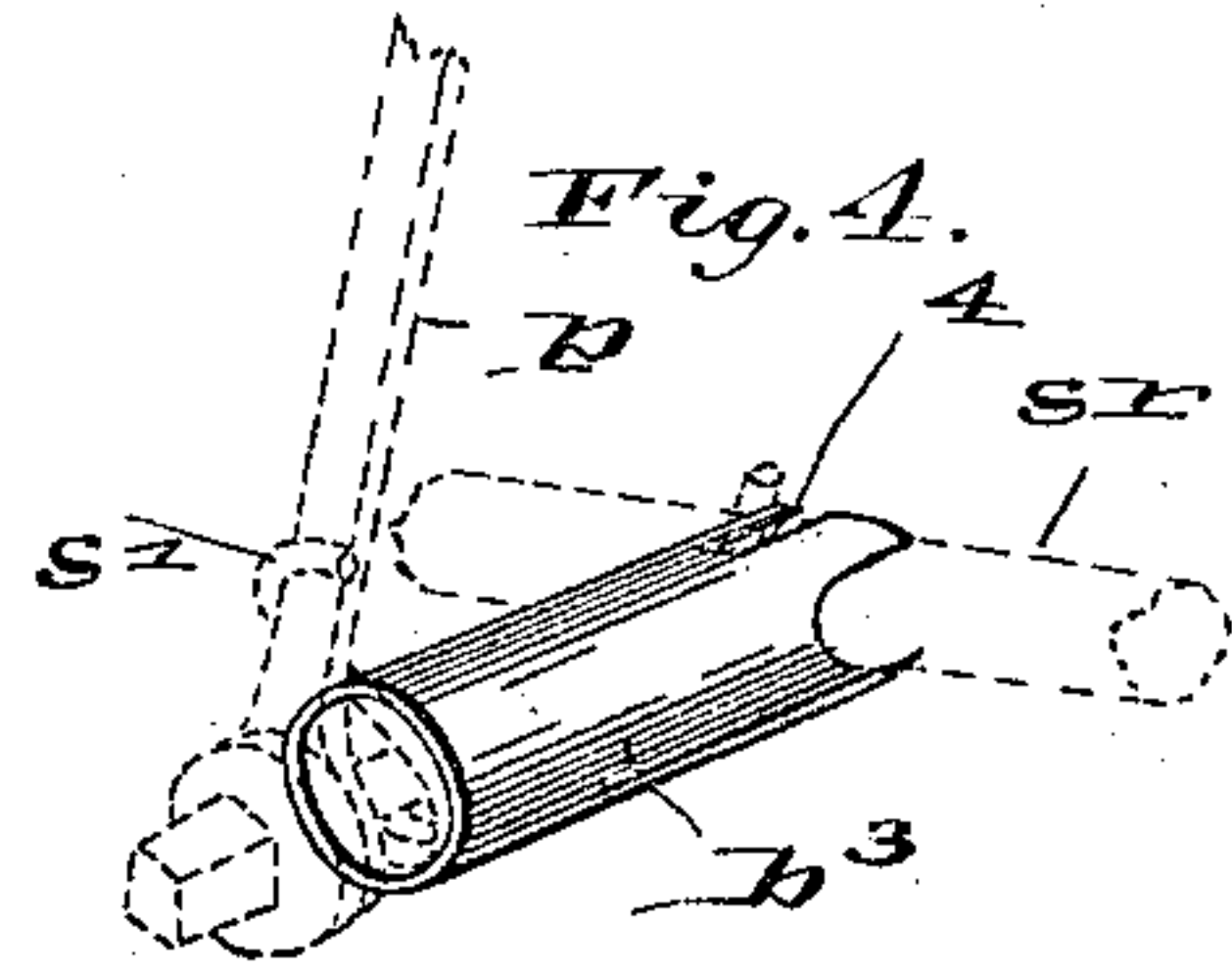
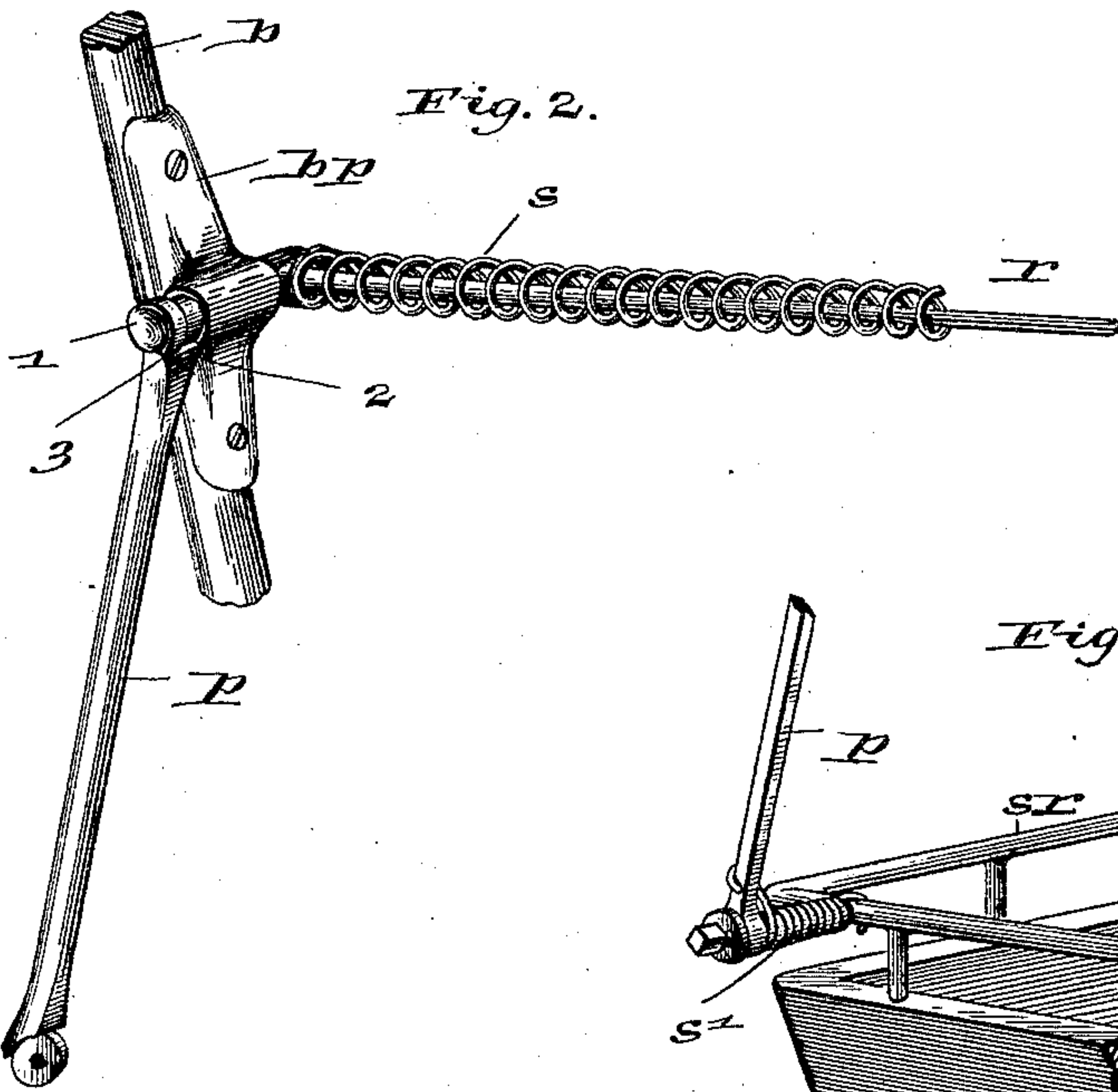
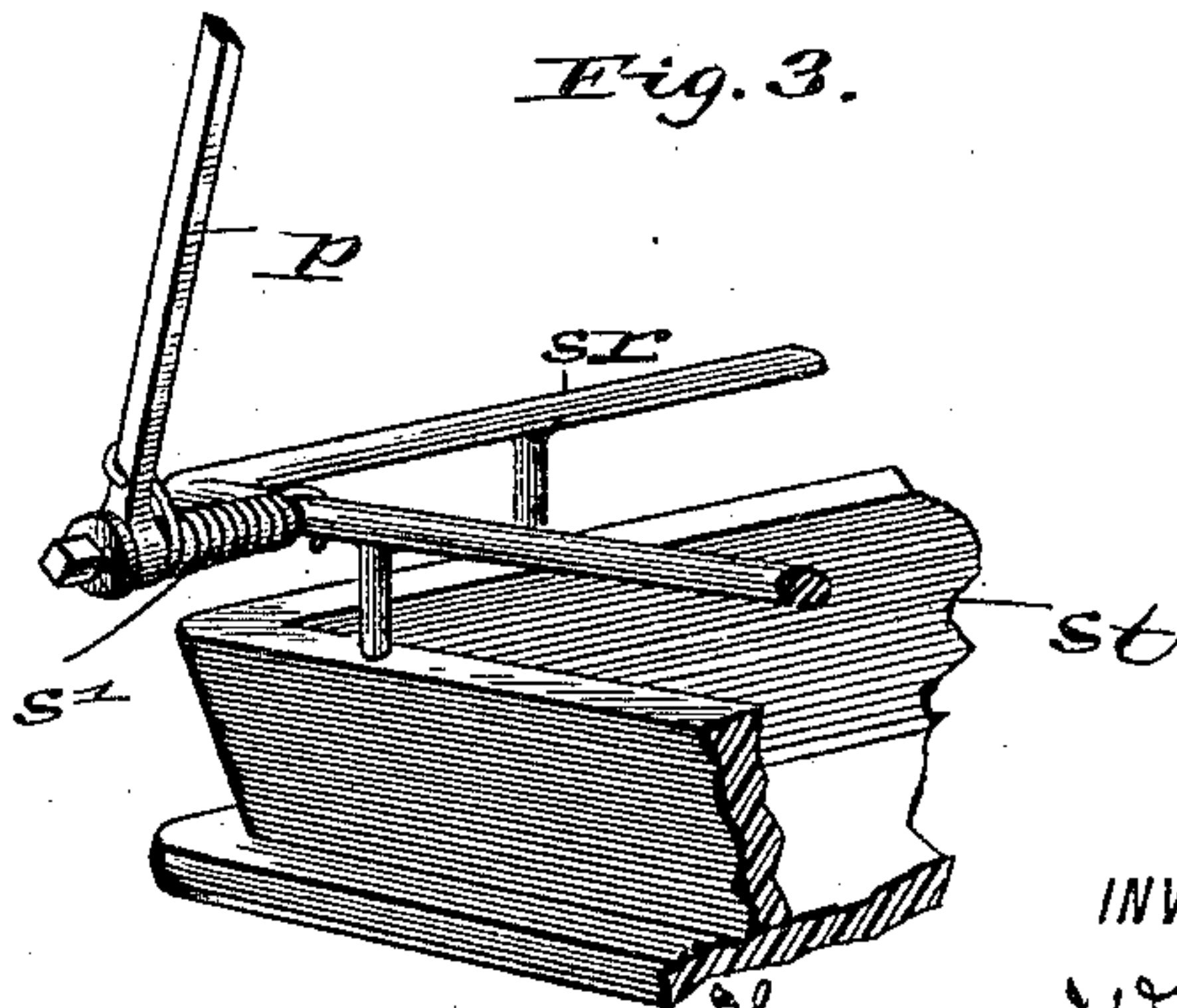


Fig. 3.



WITNESSES:

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BUGGY-TOP.

SPECIFICATION forming part of Letters Patent No. 429,822, dated June 10, 1890.

Application filed April 5, 1890. Serial No. 346,767. (No model.)

To all whom it may concern:

Be it known that I, HERMON W. TIMMONS, of Groveland, county of Putnam, and State of Indiana, have invented certain new and useful Improvements in Buggy-Tops; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which like letters and figures refer to like parts.

My invention relates to the construction of buggy-tops, and is intended to provide means whereby the top may be thrown up or down by a simple device connected to the hood of the top within easy reach of the hand of the person seated in the buggy.

In the drawings, Figure 1 is a perspective view of a buggy-seat having a skeleton top attached. Fig. 2 is a detail perspective view of the spring-rod and its connections. Fig. 3 is an enlarged detail perspective view of the spring mechanism for assisting in carrying the top forward when it is thrown up. Fig. 4 is a detail view of a modified method of attaching the spring shown in Fig. 3.

In detail, the top is connected to the seat *st* in the usual manner, and the top is of the ordinary form of construction, the forward bow *b* being jointed at *j'*.

h is a handle connected to the bottom of the hood-rail, and is the means by which the device is operated.

p is the top-prop, having the usual joint *j*. The upper end of this prop is journaled on a pin 1, which passes through a bearing-plate *bp*, fastened to the bow, and is secured by a nut. On the inner end of this pin, between the bearing-plate and the nut, is mounted a rod *r*, about which a spring *s* is coiled, as shown in Figs. 1 and 2, the inner end of this spring bearing against a shoulder formed on the rod *r* and its outer end against a swivel-loop *l*, connected to the rail of the hood on the inner side. The upper joint of the top-prop *p* has a lug or projection 2, which is adapted to bear against a similar projection 3, formed on the end of the pin 1, forming a fulcrum at that point. The operator, taking hold of the handle *h*, pulls down, breaking the joint *j'* in the front bow, and this movement carries down the rod *r*, which, being rigidly connected

to the pin 1, rotates it, and the projection or lug on the outer end of this pin, engaging against the shoulder or projection formed on the upper part of the top prop, as shown in Fig. 2, operates to break the joint *j*, so that the top can then be readily thrown back, both of the rigid joints being broken by one and the same operation.

When it is desired to throw the top up, the operator takes hold of the handle and draws it forward, and this movement of itself naturally operates to straighten the knuckle-joints, and they then become rigid; but in order to assist this operation I preferably mount a second coiled spring *s'* on an arm connected on each side of the seat-rail *sr*, to which the lower end of the prop *p* is fastened. This spring may be mounted directly on this arm, as shown in Fig. 1, or it may be inclosed in a barrel *b³*, as shown in Fig. 4. This barrel fits against the seat-rail and has a slit 4 on its upper side, through which the inner end of the coiled spring is passed, the outer end of this spring being connected to the top-prop, and as the latter is thrown back it increases the tension of the spring, and as the top is being thrown forward the force of the spring is exerted to aid it in this forward movement and restore it to its normal position. The hood portion *b'* of the top is made rigid all around, this being necessary in order to allow the lever mechanism to operate in unlocking the rear joint when the forward end is unlocked by means of the handle.

It will be observed that the breaking of the joints and throwing back of the top compresses the spring *s* upon its rod, and when the top is being thrown up the natural tension of this spring operates to assist the movement, and the spring returns to its natural position. As will be seen, the spring holds the hood portion of the top stationary and rigid until it is drawn down by the handle.

What I claim as my invention, and desire to secure by Letters Patent, is the following:

1. A buggy-top having a hood connected to the front bow, the latter jointed, as shown, and connected to the rear bows by suitable strips of flexible material, a spring-rod connected to the hood-frame in front and in the rear to a pin mounted in bearings connected to

- one of the rear bows, and a top-prop connected to the outer end of such pin and below to an arm extending from the seat-frame, in combination with a handle fastened to the hood, whereby the breaking of the joints in the front bows operates through the mechanism of the spring-rod to break the joints in the top-props connected with the rear bows, substantially as shown and described.
2. In a buggy-top, a hood-frame connected to the front bow, the latter jointed, as shown, and a spring-rod also connected to the hood-frame and to one of the rear bows by a suitable bearing, which is in turn connected to the top-prop, in combination with means connected to the hood-frame for breaking the outer joints and through the leverage of the spring-rod the joints of the top-props, substantially as shown and described.
3. A buggy-top comprising a series of bows connected to the seat-frame, the front bow jointed and connected to the rigid hood, spring-rods also connected to the hood-frame and to top-props connected to the bows behind for locking them in position, with means, such as a handle, connected to the hood-frame for breaking the joints in the top-props and bows at one and the same operation, substantially as shown and described.
4. In a buggy-top, a series of bows *b*, the front one jointed at *j'*, the hood-frame *f*, rigidly connected to such bows in front and at the rear by flexible strips *c* to the other bows *b*, a spring-rod *r*, moving in a swivel-loop connected to the hood-frame, having a spring *s* coiled thereon, a bearing-plate *bp*, secured to one of the rear bows, the pin *l*, passing through such bearing-plate and carrying on its inner end the spring-rod *r* and on its outer end the top-prop *p*, jointed at *j*, a handle *h*, or its equivalent, connected to the hood-frame, whereby the pulling down upon the latter breaks the joint in the front bows and operates the spring-rod to break the joint in the top-props, all combined substantially as shown and described.
5. In a buggy-top, a rod *r*, having a spring *s* coiled thereon, connected to a pin having bearings in a plate connected to one of the rear bows, and the jointed top-prop *p*, mounted on the outer end of such pin, substantially as shown and described.
6. In a buggy-top, a coiled spring *s'*, mounted upon arms connected to the seat-frame, such spring connected at one end to such seat-frame and at its other to the jointed top-prop, whereby its tension aids in throwing the top up and holding it in position, substantially as shown and described.
7. In a buggy-top, a hood-frame *f*, connected to the rear bows by flexible strips *c* and rigidly connected to the front bow, the latter jointed at *j'*, substantially as described.
- In witness whereof I have hereunto set my hand this 28th day of March, 1890.
- HERMON W. TIMMONS.
- Witnesses:
C. P. JACOBS,
H. D. NEALY.