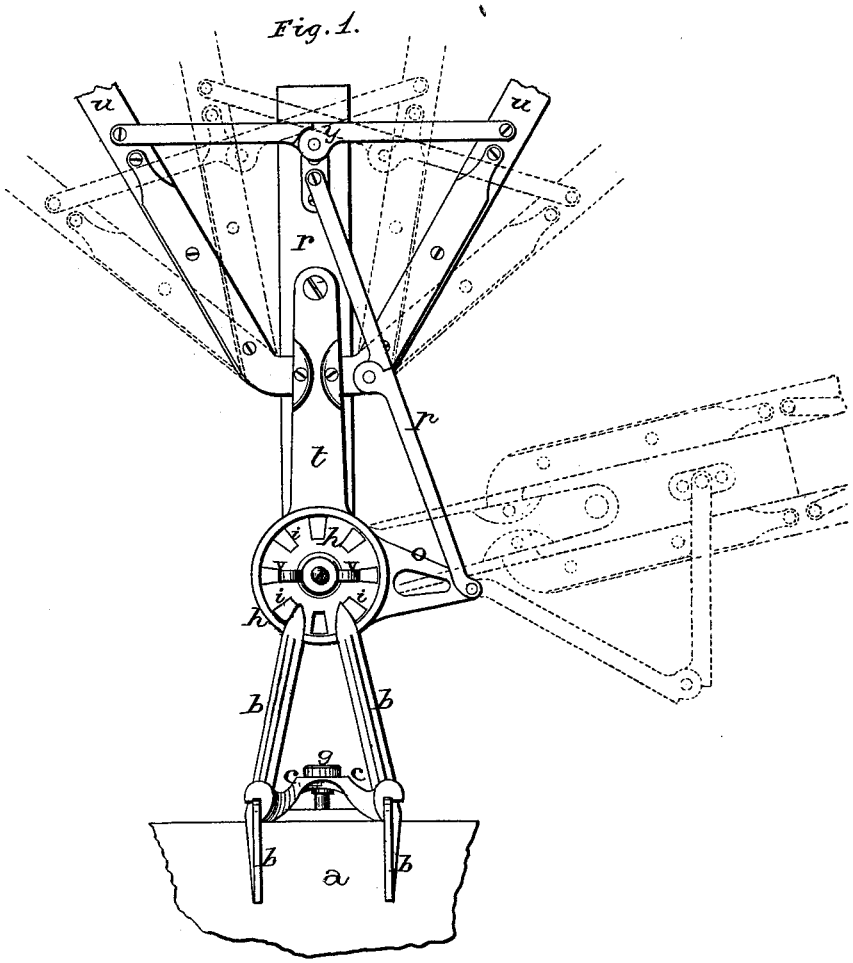
2 Sheets—Sheet 1.

# I. Z. MERRIAM.

## Adjustable Buggy-Top.

No. 200,797. Patented Feb. 26, 1878.

*Fig. 1.*

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2 Sheets—Sheet 2.

# I. Z. MERRIAM.

## Adjustable Buggy-Top.

No. 200,797. Patented Feb. 26, 1878.

Fig. 2.

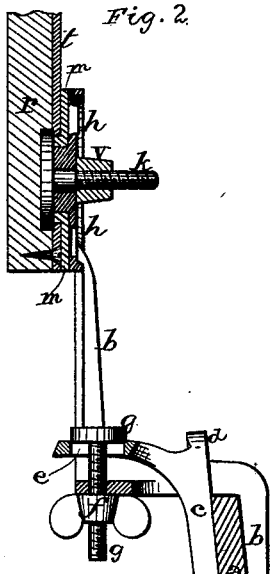



Fig. 3.

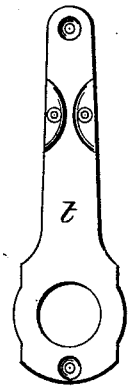



Fig. 4.

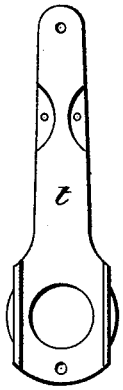



Fig. 5.

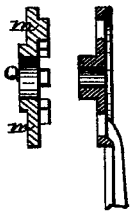



Fig. 6.

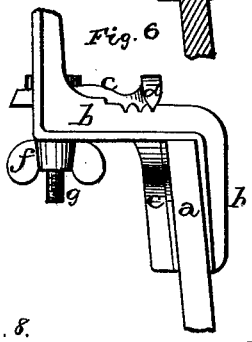



Fig. 7.

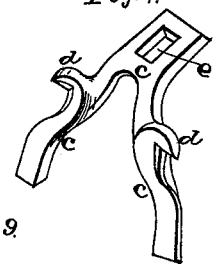



Fig. 8.

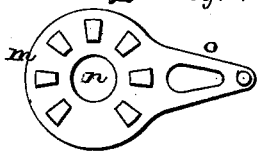



Fig. 9.

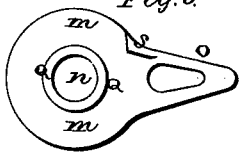
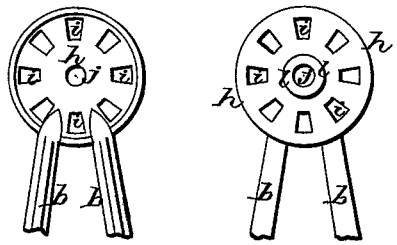



Fig. 10.

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# UNITED STATES PATENT OFFICE.

IRAM Z. MERRIAM, OF DUBUQUE, IOWA.

## IMPROVEMENT IN ADJUSTABLE BUGGY-TOPS.

Specification forming part of Letters Patent No. **200,797**, dated February 26, 1878; application filed November 19, 1877.

*To all whom it may concern:*

Be it known that I, IRAM Z. MERRIAM, of Dubuque, in the county of Dubuque and State of Iowa, have invented certain new and useful Improvements in Adjustable Buggy-Tops or Seat-Awnings; and I do hereby 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in adjustable buggy-tops or seat-awnings; and it consists in the arrangement and combination of parts, that will be more fully described hereinafter, whereby the top is clamped to the seat, and the top made adjustable back and forth past the center, and can be opened and closed and raised and lowered, at pleasure, from the inside.

Figure 1 is a side elevation of my invention, showing the top in different positions. Fig. 2 is a vertical section of the same. Figs. 3, 4, 5, 6, 7, 8, 9, and 10 are detail views of different parts.

*a* represents the seat, of any desired construction, to the ends of which the top is adjustably clamped. The clamp is formed of two parts, *b c*, the one, *b*, of which is the larger, and serves not only as a clamp, but as a support for the top. This part *b* consists of the vertical portion, which has its lower portion bent inward horizontally, and then the inner ends of this horizontal part are turned downward, so as to catch against the inside end of the seat *a*. The part *c* has its lower end formed of two prongs, which catch against the outside end of the seat, while the upper end curves upward and outward, passing up through the space between the two prongs of the part *b*. Each of the prongs of the part *c* has a sharp-edged catch, *d*, projecting from one side, which catch over the top of the prongs of the part *b* in the notches formed to receive them, and form fulcrums, upon which the part *c* moves in the act of clamping the outside of the seat.

Through the outer end of the part *c* is formed a slot, *e*, down through which passes the clamping-bolt *g*, which also passes down through a hole in the horizontal portion of the part *b*. As the thumb-screw *f* is tightened up against *b*, the outer end of *c* is drawn downward, thereby causing its lower ends to clamp against the outside end of the seat. It will be noticed that both parts of this clamp are made of as light material as is consistent with strength, and of any ornamental pattern or design that may be preferred.

The upper end of the part *b* is formed into the disk *h*, through which are formed a number of openings, *i*, around its outer edge, and a central one, *j*, through which the clamping-bolt *k* passes. Upon the disk, on its outer side, is formed the circular flange *l*, which projects into the opening *n*, made to receive it, in the center of the toothed disk *m*. This flange *l* serves as a hub for the support of the top, and upon which both the top and the disk *m* move.

The disk *m* has a number of teeth on its inner side, which teeth project into the said holes, so as to hold the disk *m* rigidly in any position in which it may be placed. Projecting rearwardly from this disk is an arm, *o*, to which the brace *p* is pivoted. Upon the outer side of this disk *m* is formed a circular flange or hub, Q, which projects into the circular socket in the lower end of the casting *t* on the end of the central bow *r*. This hub Q forms the direct support and pivot upon which the whole cover moves independently of the clamping-screw *k* and the disk. Upon the outer side of this disk is also formed the stop *s*, against which the rear side of the bow *r* strikes, so as to regulate the distance the top shall move forward, and as a support for it when let down.

The clamping screw or bolt *k* has its head recessed in the inner side of the lower end of the bow *r*, is held in position by the casting *t*, and projects inward through the center of the two disks *m h*, and receives a thumb-nut, *v*, or other equivalent device, upon its inner end, so that the top and the intermediate disk *m* may be clamped to the part *b*.

The front and rear bows *u* are both pivoted to the central bow *r* at their lower ends, and are connected together by means of the jointed brace *y*. By thus pivoting them to the central bow, either one or both may be closed in-

ward, so that the spread of the cover may be contracted to any desired extent. Both of the braces being placed inside of the cover, the top can be opened and closed and raised and lowered from the inside without any trouble.

When it is desired to adjust the top so that it will swing forward or backward over the center of the seat, the thumb-nut is loosened, the clamping bolt or screw is moved backward sufficiently far to allow the teeth to clear the holes in the disk *h* when the disk *m* is turned, so that its arm will be raised or lowered, according as it is desired to swing the top forward or backward. In thus adjusting the disk *m* the brace *p* causes the central bow to move with it, so that in adjusting the disk *m* the whole top is adjusted correspondingly.

Another special feature of my invention consists in the application of the brace *p* to the inside of the top. When the top is in an upright position the brace *p* is made taut, or is strained into position, by reason of the lower end of the center bow coming in contact with the stop *s*, as shown. The straining of the brace *p*, as specified, binds the central bow and disk *m* together, and has a tendency to prevent any rattling when the vehicle is in use on rough roads.

When the top is let back it rests on the stop *s*. The stop and support *s* is here shown as forming a part of the disk *m*; but it is evident that it may form a part of the casting on the lower end of the central bow.

My invention is equally well adapted to the use of four bows as it is to three.

By constructing the clamp as above described, the top can be readily attached to and removed from the seat, and will not mar or injure its appearance in any manner. By pivoting one part of the clamp upon the other and making it adjustable back and forth in the notches, the clamp can be applied equally well to seats of different thicknesses. The movable part of the clamp (represented by *c*) may have one prong only on its lower end; but I use two, considering this the better and stronger form.

The relative positions of the lower ends of *b* and *c*, with some slight modifications, may be changed; but I use them as specified, believing it the handier and better way.

Having thus described my invention, I claim—

1. In combination with a seat and a top, a clamp for securing them together, consisting of the part *b*, having the disk *h* upon its upper end, and the part *c*, supported and moving upon the part *b*, substantially as shown.

2. The clamp for securing the seat and top together, composed of the two parts *b c*, the part *b* having the disk *h* formed upon its upper end, and the part *c* slotted at its outer end to receive a clamping-bolt, *g*, whereby the part *c* may be adjusted back and forth upon the part *b*, substantially as described.

3. In a buggy-top or seat-awning, the perforated disk *h*, forming the top of the seat-clamp *b*, and provided on its outer side with a flange, *l*, upon which the whole top is supported and moves, substantially as specified.

4. The intermediate disk *m*, provided with teeth to catch in the disk *h*, and an arm to fasten the brace *p* to, substantially as shown.

5. The intermediate disk *m*, having the hub Q, upon which the central bow *r* turns, substantially as described.

6. The combination of the disks *h m*, central bow, arm, brace *p*, and bolt or screw *k*, and nut, substantially as set forth.

7. The intermediate toothed disk *m*, adjustable back and forth between the disk *h* and the central bow *r*, and provided with a stop, *s*, to support the top when it is down, substantially as specified.

8. The intermediate toothed disk *m*, adjustable back and forth between the disk *h* and the bow *r*, and which is provided with the arm *o*, flange or hub Q, and stop *s*, substantially as shown.

9. In a seat-cover, the combination of a bow having a limited movement of its own, a toothed disk to which this bow is connected, and which can be adjusted back and forth, and a disk or support to which the cover and toothed disk are clamped, substantially as specified.

10. In combination with a seat-cover, the brace *p*, located inside of the cover, and the adjustable disk *m*, having the arm *o*, substantially as described.

11. In combination with a top that can be raised and lowered and opened and closed, a brace, *p*, for supporting it when up, and a separate brace, *y*, for holding it open, both braces being located inside of the top in easy reach of the driver, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 10th day of November, 1877.

IRAM Z. MERRIAM.

Witnesses:
O. F. GLEM,
ISAAC GRIFFITH.