(No Model.)

2 Sheets—Sheet 1.

L. SCHMETZER.

CARRIAGE TOP.

No. 251,472. Patented Dec. 27, 1881.

Fig. 1.

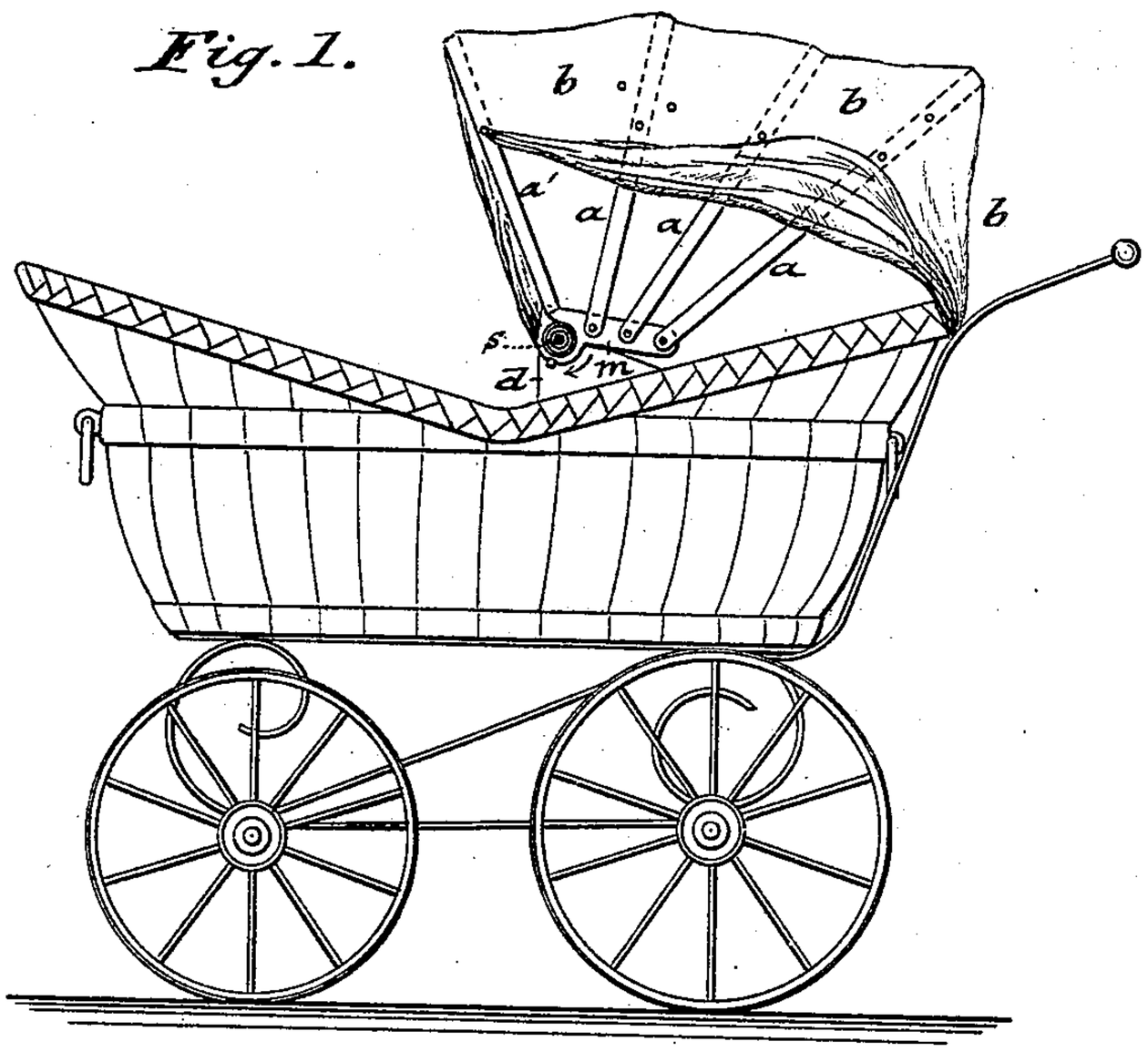


Fig. 4.

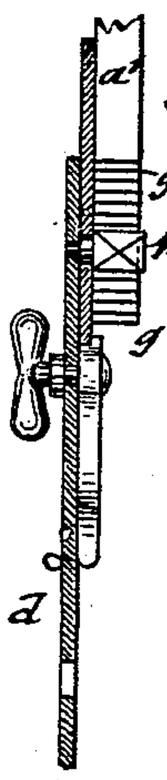


Fig. 2.

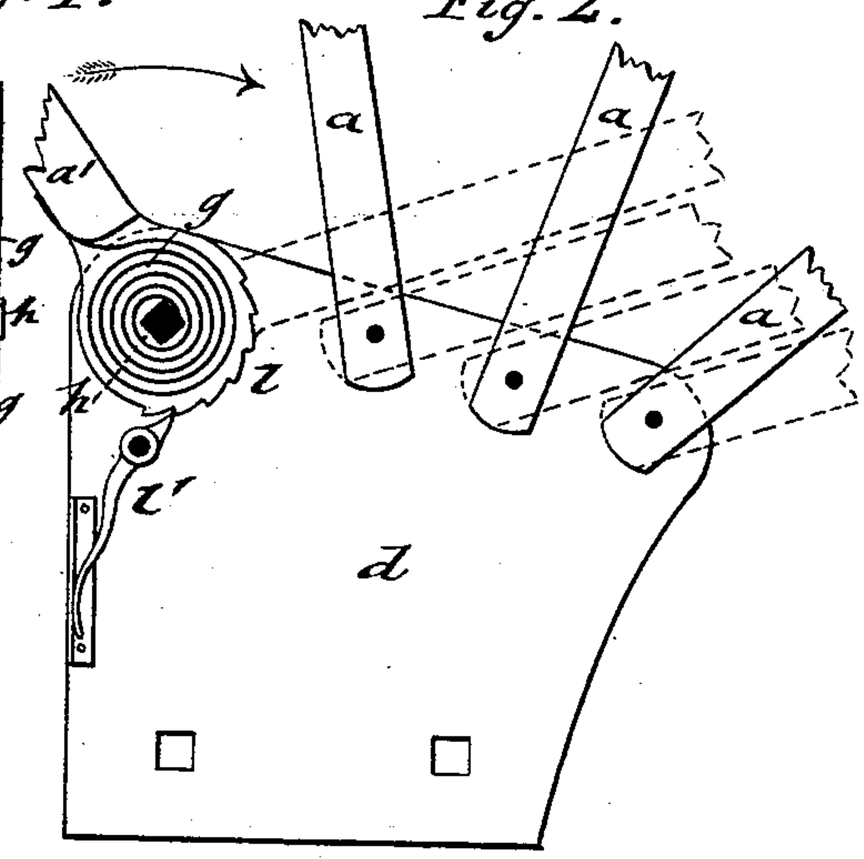


Fig. 3.

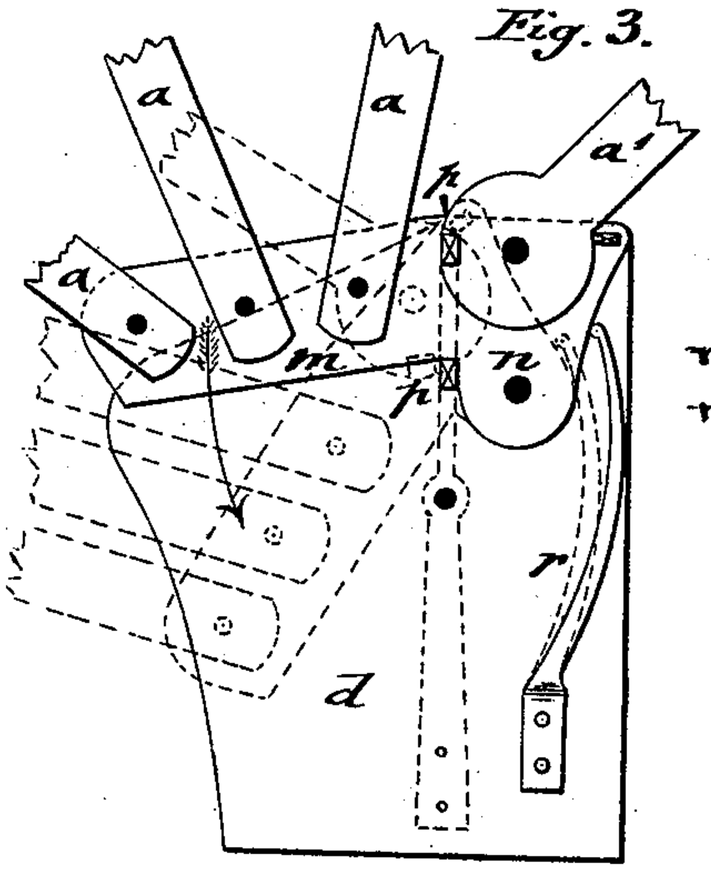
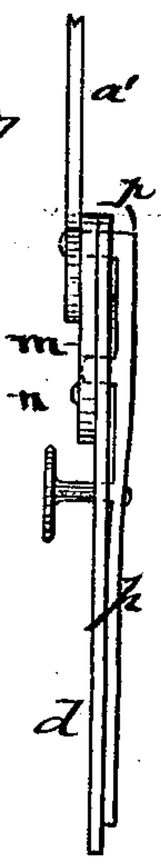


Fig. 5.



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(No Model.)

2 Sheets—Sheet 2.

L. SCHMETZER.

CARRIAGE TOP.

No. 251,472. Patented Dec. 27, 1881.

Fig. 6.

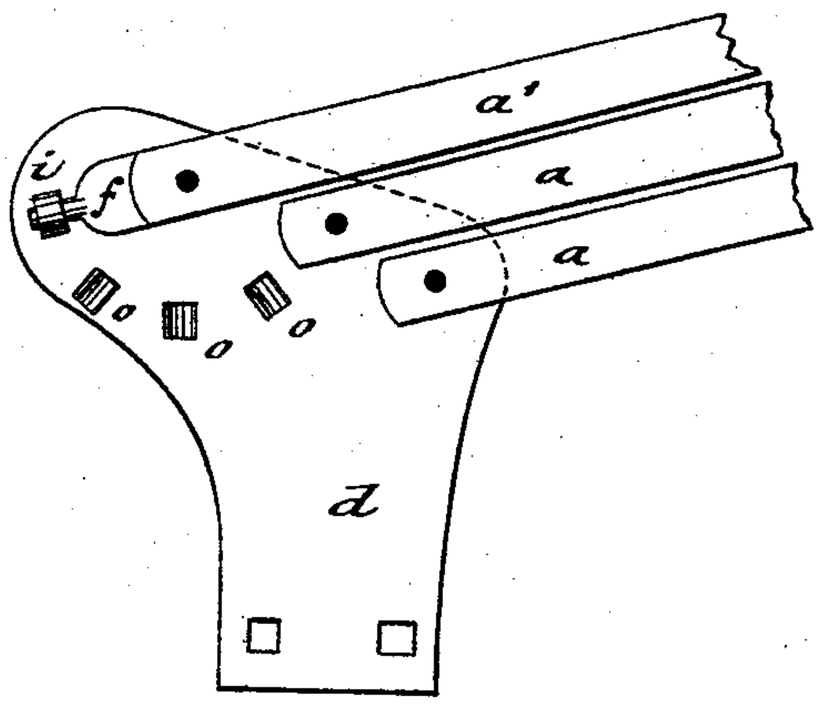


Fig. 7.

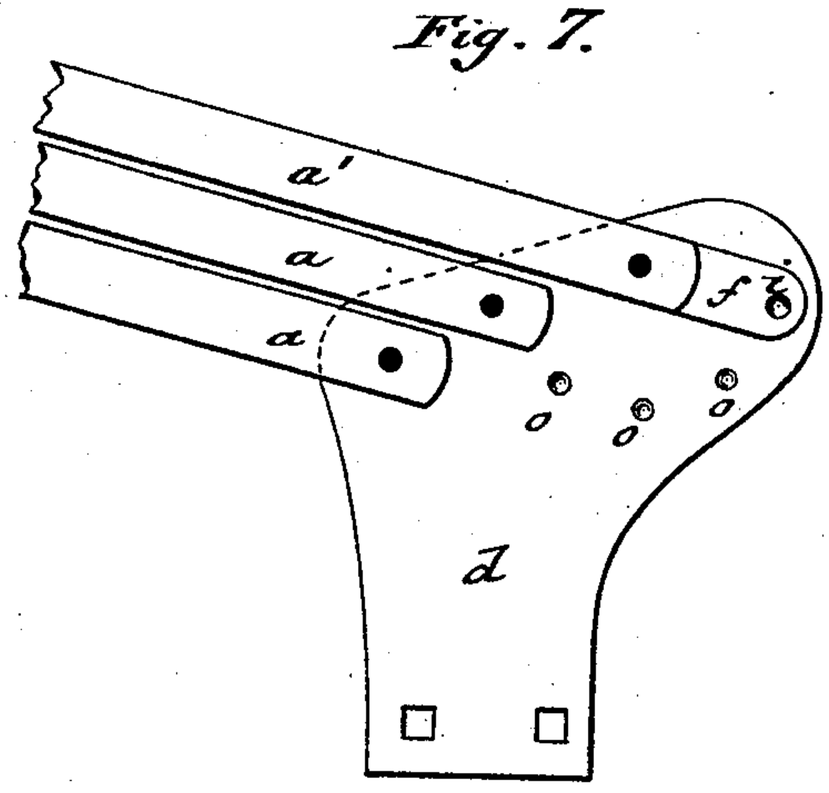


Fig. 8.

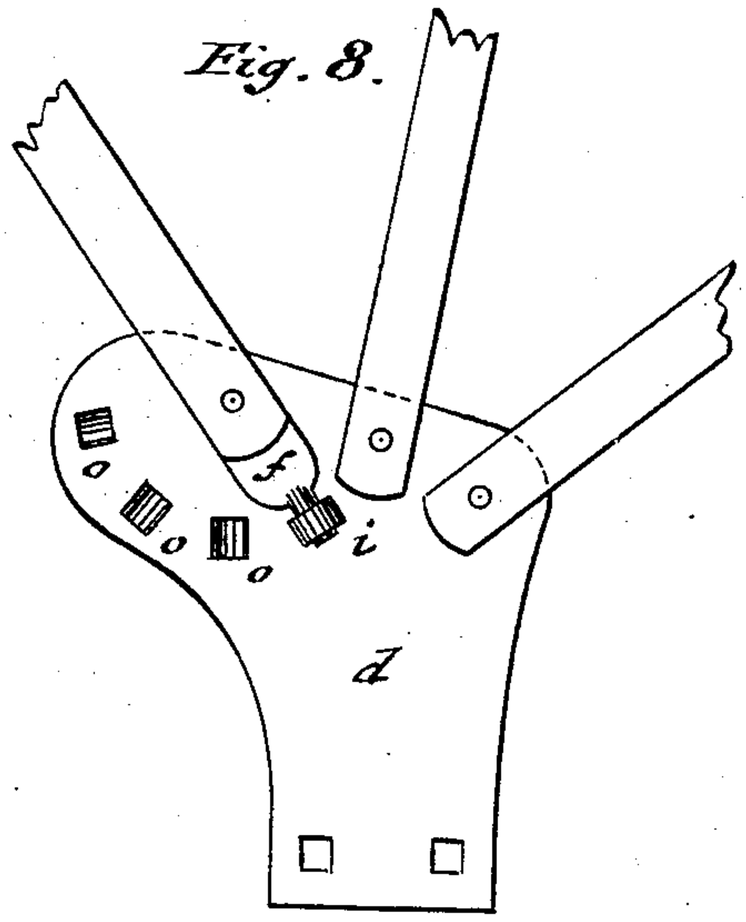
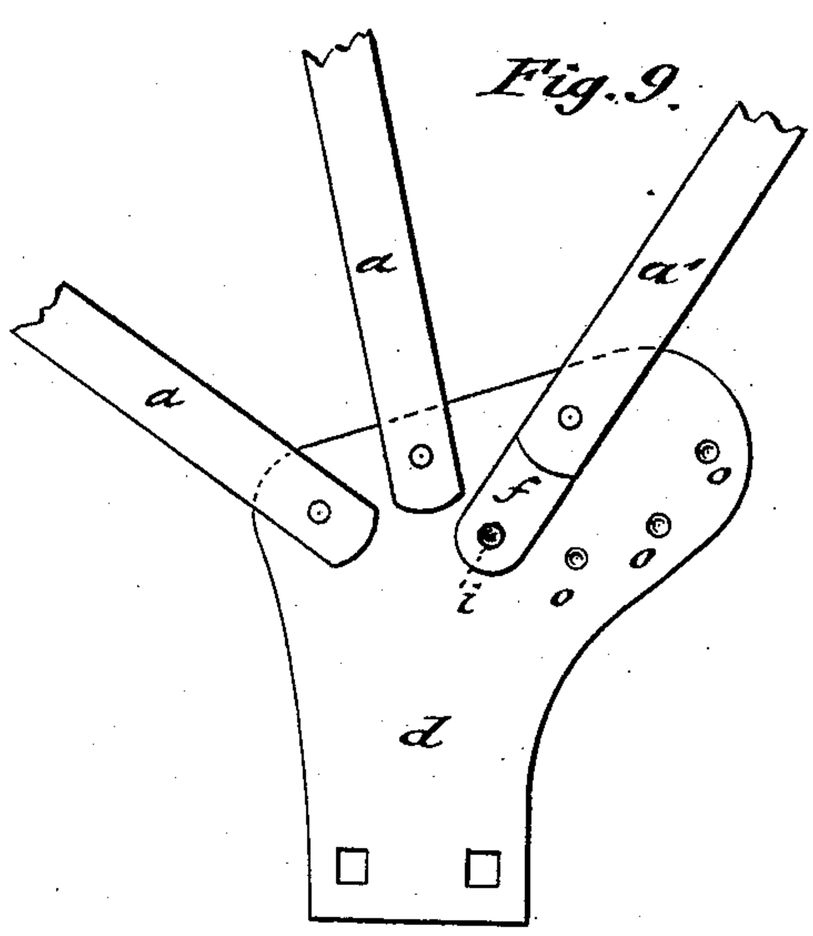


Fig. 9.



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UNITED STATES PATENT OFFICE.

LOUIS SCHMETZER, OF ROTHENBURG-ON-THE-TAUBER, BAVARIA, GERMANY.

CARRIAGE-TOP.

SPECIFICATION forming part of Letters Patent No. 251,472, dated December 27, 1881.

Application filed October 22, 1881. (No model.)

To all whom it may concern:

Be it known that I, LOUIS SCHMETZER, residing at the city of Rothenburg-on-the-Tauber, in the Kingdom of Bavaria, German Empire, have invented Improvements in Carriage-Tops, of which the following is a specification.

The tops of children's and other carriages are generally supported in their raised state by means of straps or cords or by means of hinged brace-rods. The straps are objectionable in children's carriages, as they are in the way and inconvenient in use, while the hinged braces not only get soon worn and shaky by use, but can only support the top in a single fixed position.

This invention relates to an improved carriage-top which can be locked at any suitable position, and which is adapted equally well for children's and large carriages.

The invention consists of a carriage-top the yokes of which are pivoted to side plates of the carriage-body and secured by an adjustable locking device, which is arranged in connection with the ends of the front yoke, so as to retain the top in any desired position. The front yoke may also be arranged with springs at the ends, by which the top is automatically folded when the locking device is released.

In the accompanying drawings, Figure 1 represents a side view of a child's carriage with my improved top. Figs. 2 and 3 are detail side views of the locking and adjusting mechanisms of the top. Figs. 4 and 5 are respectively a vertical transverse section of Fig. 2 and an end view of Fig. 3; and Figs. 6, 7, 8, and 9 are side views of different modifications of the locking device of the top.

Similar letters of reference indicate the same parts.

In the accompanying drawings, *a a'* represent the supporting-yokes, which, together with the cover *b*, to which they are attached, form the top of the carriage. The yokes *a a'* are pivoted to side plates, *d*, which are permanently secured by means of screws or otherwise to the body of the carriage.

To the front yoke, *a'*, is applied my improved locking and adjusting mechanism by which the top of the carriage is to be retained in a raised or lowered or intermediate position.

In Figs. 2, 3, 4, and 5 a more complicated form of locking device is shown, while in Figs. 6, 7, 8, and 9 the simpler forms of the same are shown. In Figs. 7 and 9 the front yoke, *a'*, is provided at both ends with an extension, *f*, of less thickness, so that it has a certain spring action. A bead, *i*, projects from the extension *f* toward the plate *d*, so as to engage into indentations or holes *o* of the same, which holes are arranged concentrically to the pivot of the yoke *a'*.

Any desired number of holes may be arranged, so that the top can be retained at any desired position, according to the angle at which the front yoke, *a'*, is locked. As the cover *b* connects the front yoke, *a'*, with the remaining yokes, *a*, the entire top is thus securely held in a position corresponding to that of the front yoke.

In Figs. 6 and 8 the spring-tension *f* of the front yoke, *a'*, carries a small anti-friction roller, *i*, which sets into indentations *o* of the plate *d* in the same manner as the bead *i* into those shown in Figs. 7 and 9.

When it is desired to arrange the top so that it may be lowered automatically whenever the front yoke is released from its locking device, a spiral spring, *g*, is applied with its inner end to the pivot *h* of the front yoke, *a'*, and with its outer end to a shoulder of the same, as shown in Figs. 2 and 4. The spring *g* imparts thereby to the yokes a tendency to move in the direction of the arrow shown in Fig. 2 whenever the locking device is released. The ends of the front yoke, *a'*, are enlarged and made of disk shape, the circumferences of the disks being toothed so as to form a kind of ratchet, *l*, into which a spring-pawl, *l'*, is thrown. By this device the front yoke, *a'*, and consequently the entire top, may be retained at any desired position, the ratchet and pawl forming the equivalents of the locking devices shown in Figs. 6, 7, 8, and 9.

In place of applying the ends of the yokes *a a'* to the fixed side plate, *d*, of the carriage, they may also be applied to an intermediate and oscillating plate, *m*, as shown in Figs. 3 and 5.

The auxiliary oscillating plate *m* turns around the pivot *n*, (shown in Fig. 3,) and is retained by a double spring-pawl, *p*, which passes through slots of the side plate, *d*, and engages

one or more recesses of the front yoke, *a'*, and of the plate *m*, as shown clearly in Fig. 3.

The plate *m* is acted upon by a strong band-spring, *r*, (shown in Fig. 3,) or by a spiral spring, *s*, applied to the pivot *n* and the plate *m*, as shown in Fig. 1, by which the oscillating plate *m* is moved in the direction of the arrow whenever it is desired to lower the top of the carriage by releasing the locking part *p*. The last arrangement has the advantage that the yokes of the top can be folded closer together and nearer to the body of the carriage, so as not to be in the way and exposed to injury in shipping the carriage.

What is claimed as the invention is—

1. In a carriage-top, the front yoke provided with flexible extensions, in combination with rollers attached thereto and plates provided with holes adapted to receive and hold the rollers, substantially as described.

2. The cover and yokes *a*, in combination with the front yoke, *a'*, ratchets and spring-pawls, and coil-springs surrounding the pivots that connect the yokes and side plates together, substantially as described.

3. The combination of fixed side plates, the intermediate plates, *m*, the yokes attached thereto, and the coil-springs, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

LOUIS SCHMETZER.

Witnesses:

CARL FEHLERT,

CARL NEUER.