No. 646,974. Patented Apr. 10, 1900.

F. GAHM.

TOP BUGGY.

(No Model.) (Aprlication filed Jan. 4, 1900.)

Fig. 1.

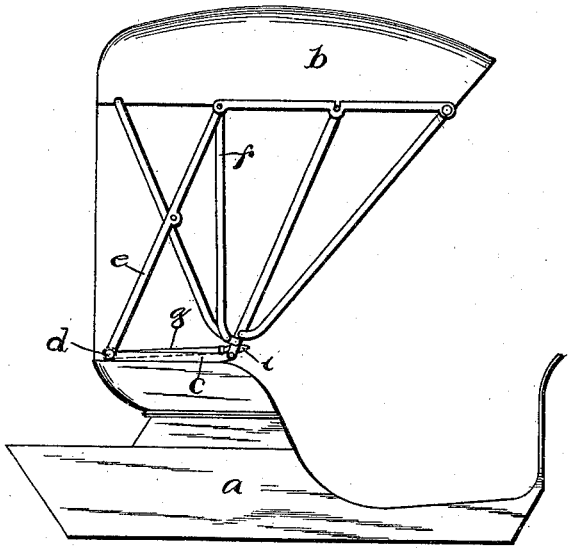


Fig. 2.

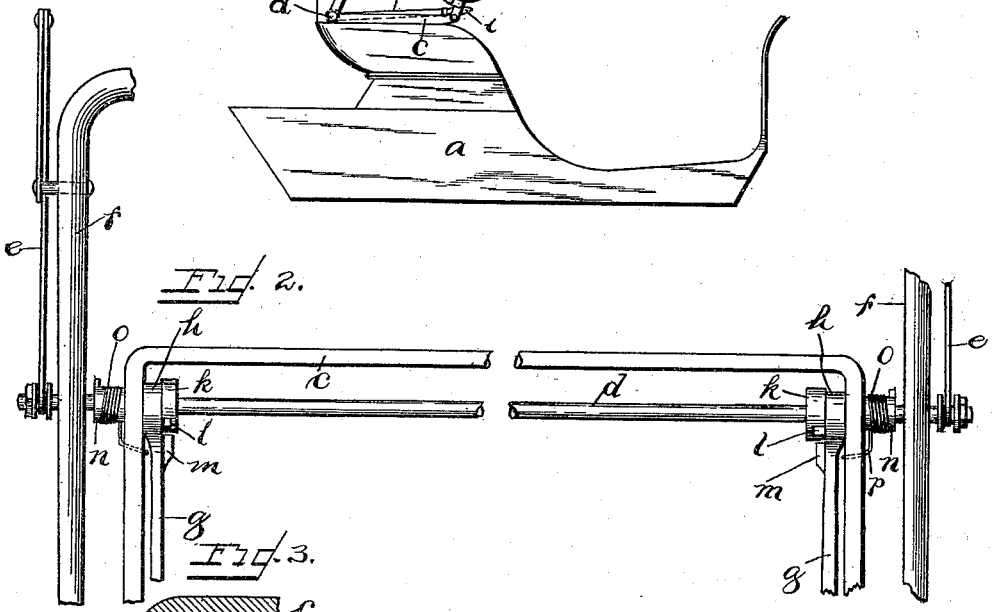


Fig. 3.

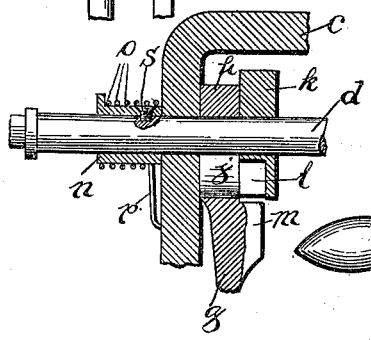
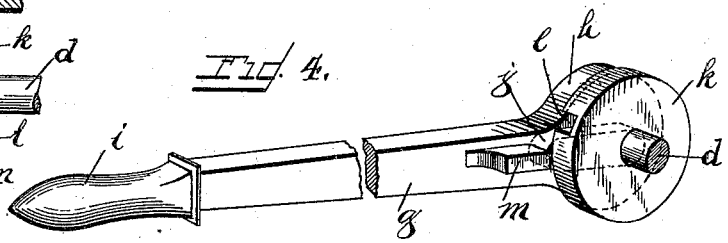


Fig. 4.



Witnesses
G. B. Keir
Ira D. Perry

Inventor
Frank Gahm
By Bond, Adams, Pickard & Jackson.
Attys.

UNITED STATES PATENT OFFICE.

FRANK GAHM, OF RANSOM, ILLINOIS.

TOP-BUGGY.

SPECIFICATION forming part of Letters Patent No. 646,974, dated April 10, 1900.

Application filed January 4, 1900. Serial No. 326. (No model.)

To all whom it may concern:

Be it known that I, FRANK GAHM, a citizen of Ransom, in the county of La Salle and State of Illinois, have invented certain new and useful Improvements in Top-Buggies, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to buggies, and particularly to means for raising and lowering the top thereof.

In buggies provided with the ordinary top of the kind shown in Figure 1 it is a matter of considerable difficulty for the occupant to lower the top, especially when the side curtains of the top are down, owing to being obliged to reach around at each side to break the joint of the usual side brace. It is also difficult for the occupant of the buggy to raise such top from its lowered position. Furthermore, it is found that with buggy-tops of the ordinary construction the parts are injuriously racked and strained by the unequal pressure applied to the two sides in raising and lowering.

The object of my invention is to provide means whereby the occupant of the buggy while in the seat can easily and quickly raise or lower the top and without any undue strain on either side or any of the parts of the top. It has for a further object to provide a spring arranged to exert a lifting effect on the buggy-top, so that such top may be the more easily elevated into place. I accomplish these objects by means of the devices shown in the drawings and hereinafter described.

That which I claim as new will be set forth in the claims.

In the accompanying drawings, Fig. 1 is a side elevation of a buggy body and top provided with my improvements. Fig. 2 is a detail, being a plan view of the top raising and lowering devices and attached parts in the position assumed when the top is down. Fig. 3 is a detail, being a horizontal section through one corner of the frame secured to the buggy-body, showing also a portion of the rock-shaft journaled in said frame, the operating-lever, and the part it engages when the shaft is to be rocked; and Fig. 4 is a perspective view of the operating-lever and the circular plate that is secured on the rock-shaft with which the lever is adapted to engage.

Referring to the drawings, *a* indicates the body of a buggy, and *b* the top, both of ordinary construction.

c indicates a metal frame secured, as usual, to the buggy-body *a* and adapted to support the buggy-top. It is usual to provide this frame near each of its corners with a lateral projection, upon which the jointed brace that holds the buggy-top in its elevated position is pivoted and which also serve as supports for the side portions of the bows of the buggy-top when such top is lowered. These separate projections I dispense with; but at about the places in the metal frame *c* from which such projections extend I form holes and place therein a shaft *d*, which can be freely turned. The ends of this shaft *d* project sufficiently far from the sides of the metal frame *c* to act as stops or supports for the top when lowered, as did the separate projections referred to.

e indicates the usual jointed braces for supporting the buggy-top in its raised position. Each brace is securely fixed to the shaft *d*, near one end thereof, and is held in position on such shaft by suitable nuts or other means. The other end of each brace is pivoted, as shown, to one of the bows of the buggy-top, such bow being indicated by *f*.

g indicates a lever, one end being formed into a head *h* and the other end provided with a handle portion *i*. In the head portion *h* is formed a slot *j*, and through this slot passes the shaft *d*. Keyed or otherwise firmly secured to the shaft *d* at a sufficient distance from the side of the frame *c* to allow for the head portion *h* of the lever *g* is a circular plate *k*, provided on the face next to the lever *g* with an opening *l*, adapted to receive a lug *m* on the side of the lever *g* immediately below the head portion *h*. Two of these levers *g* and plates *k* are shown, one on each side of the buggy; but, if desired, one only may be employed.

n indicate short sleeves on the shaft *d*, one on each projecting end of such shaft and each adjacent to the frame *c*. Around each sleeve is a coiled spring *o*, one end of which is fastened in any suitable manner to the sleeve and the other end of which is extended to form an arm *p*, that is carried forward and bears against the under face of the frame *c*. Each sleeve is adjustable on the shaft for the

purpose of tightening its spring *o* as desired and is secured in any position to which it may be adjusted by a set-screw *s* (see Fig. 3) or in any equivalent manner.

It is desirable that the lever *g* be disconnected from the plate *k* when the top *b* has been raised and locked in position, and to that end I make the opening *l* in such plate at a point above the horizontal position of the lever, and by reason of the slot *j* in the lever the lever can be readily pulled forward to disengage its lug *m* from the opening *l*, and thus allow the lever to drop down onto or at the side of the buggy-seat out of the way. The lever can in the same way be disengaged from the plate and dropped out of the way after the buggy-top has been lowered.

By the use of my improvements the occupant of the buggy by causing the lug *m* on the lever to enter the opening *l* in the plate *k*, that is fixedly secured on the shaft *d*, and then pulling up on the lever can rock such shaft, so as to break the joints in the side braces *e* of the top *b* and exert such a pull thereon as to lower the top. Complete control of the descent of the top is also had, so as to prevent the same from falling. To raise the top, the lever is swung up until the projection *m* can enter the opening *l* and a downward pull applied to the lever, which will of course turn the shaft *d* and through the braces *e* force the top into the desired upright position, the raising being assisted by the action of the coiled springs *o o*.

That which I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination with a buggy-body, and its movable top, of a top-supporting frame secured to the body, a rock-shaft journaled in said frame, the swinging top-braces attached to the rock-shaft and the top, a swinging hand-lever pivotally mounted on the rock-shaft and movable lengthwise thereupon, and a clutch for clutching the lever to and unclutching it from said rock-shaft by moving the lever lengthwise to completely raise and lower the top, substantially as described.

2. The combination with a buggy-body, and its movable top, of a top-supporting frame secured to the body, a rock-shaft journaled in the frame, the swinging braces attached to the rock-shaft and the top, a sleeve secured to said rock-shaft, a coiled spring attached at one end to the sleeve and at the other end to said top-supporting frame, a lengthwise-movable lever having a slot at one end through which the rock-shaft passes, and a clutch for clutching and unclutching the lever and rock-shaft by moving said lever lengthwise, substantially as described.

3. The combination with a buggy-body, and its movable top, of a top-supporting frame secured to the body, a rock-shaft journaled in said frame, the swinging braces attached to the shaft and the top, a sleeve secured to the shaft, a coiled spring attached at one end to the sleeve and at the other end to the top-supporting frame, a plate fixed to the shaft and having an opening, and a lengthwise-movable lever having a slot through which said rock-shaft passes and a projecting lug arranged to engage and disengage the opening in the plate when the lever is moved lengthwise, to clutch and unclutch said lever and shaft, substantially as described.

4. The combination with a buggy-body and a movable top therefor, of a rock-shaft, a connection between said rock-shaft and top for causing said top to be moved upon the movement of the said shaft, a lever having a slot at one end and attached by said slot upon the rock-shaft and having a lug forward of said slot, and a plate rigidly secured to said shaft and having an opening adapted to receive the said projection on the lever, substantially as and for the purpose specified.

5. The combination with a buggy-body and a movable top therefor, of a rock-shaft, a connection between said rock-shaft and top for causing said top to be moved upon the movement of the said shaft, a lever having a slot at one end and attached by said slot upon the rock-shaft and having a lug forward of said slot, and a plate rigidly secured to said shaft and having an opening adapted to receive the said projection on the lever, said opening being located above the normal horizontal position of the lever so as to keep said lever and plate out of engagement except when it is desired to turn the shaft, substantially as specified.

FRANK GAHM.

Witnesses:
J. R. WORMLEY,
LEWIS L. SMITH.