

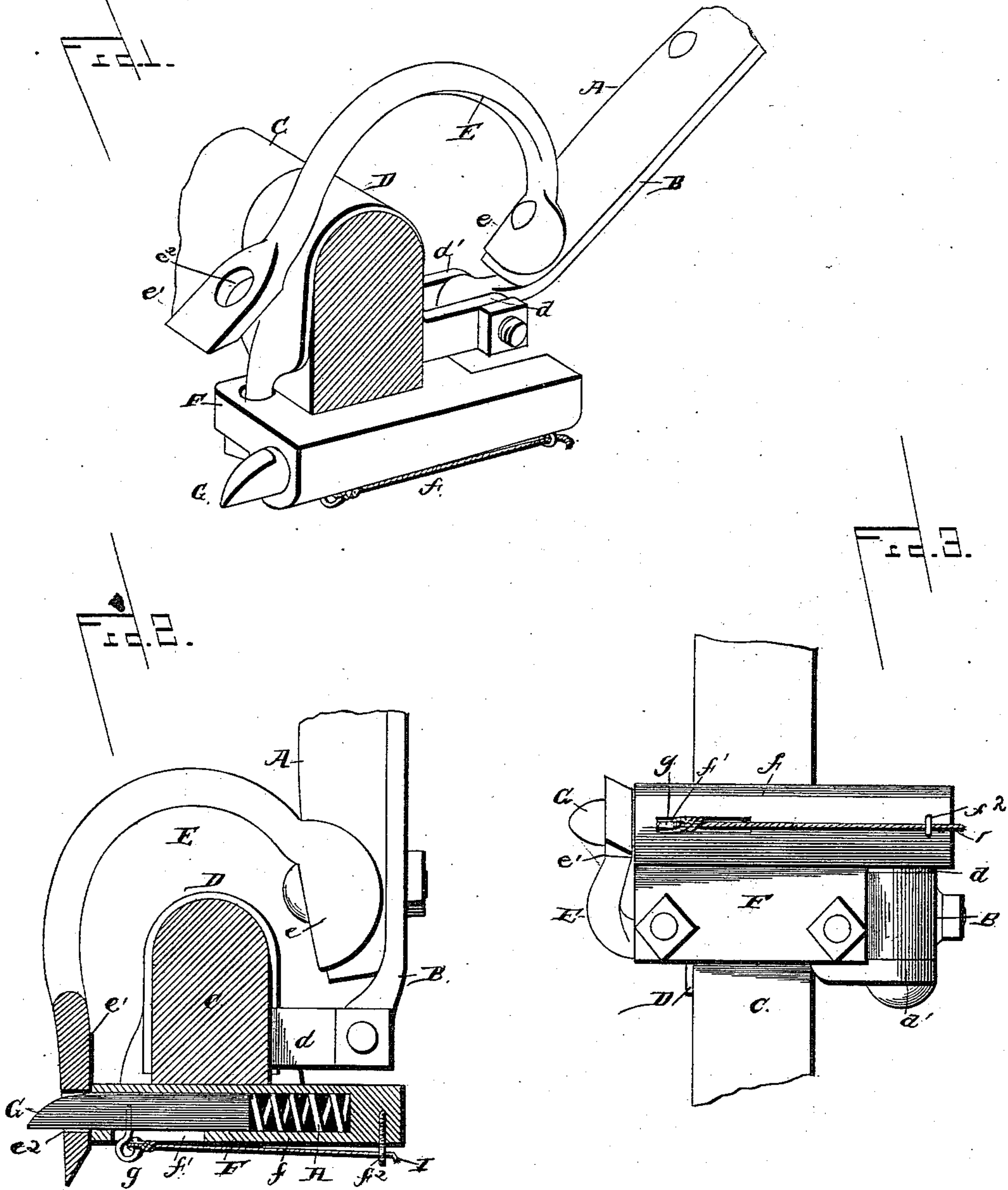
(No Model.)

G. J. SPENNEBERG.

SHAFT HOLDER.

No. 379,547.

Patented Mar. 13, 1888.



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UNITED STATES PATENT OFFICE

GEORGE JOSEPH SPENNEBERG, OF WORTHVILLE, KENTUCKY, ASSIGNOR OF ONE-HALF TO EUGENE W. BURGE AND ZACHARIAH T. WEBSTER, OF SAME PLACE.

SHAFT-HOLDER.

SPECIFICATION forming part of Letters Patent No. 379,547, dated March 13, 1888.

Application filed December 10, 1887. Serial No. 257,541. (No model.)

To all whom it may concern:

Be it known that I, GEORGE JOSEPH SPENNEBERG, a citizen of the United States, residing at Worthville, in the county of Carroll and State of Kentucky, have invented a new and useful Improvement in Shaft-Holders, of which the following is a specification.

This invention relates to shaft-holders.

The object of the present invention is the production of a shaft-holder which will, when the shafts, tongue, or thills of a vehicle are raised, automatically lock them in an elevated position and securely retain them in that position until released by a pull upon a cord, wire, or similar means connected with a latch for disengaging the same to permit the shafts, tongue, or thills to be lowered to their normal position; and, furthermore, the object of the invention is to provide a shaft-holder which will be compact, strong and durable, simple and cheap in construction, and positive and reliable in operation.

The invention consists in a shaft-holder comprising a curved arm, one end of which being suitably connected to the shaft, thill, or tongue by bolts, screws, or the like, the other end of the curved arm being wedge shaped and having a depression, concavity, or hole in it, and a spring-latch secured to the axle or running-gear, whereby when the shafts, thills, or tongue is raised the wedge-shaped end of the curved arm will engage the spring-latch, which will retain the shaft, thill, or tongue in an elevated position. Furthermore, in a shaft-holder comprising a curved arm one end of which is suitably connected to the shaft, thill, or tongue, the other end of the curved arm being wedge-shaped and having a depression, concavity, or hole in it, a spring-latch fastened to the axle and adapted to be engaged by the wedge-shaped end of the curved arm when the shaft, thill, or tongue is raised, and a guide located at the rear of the spring-latch, and a cord secured to the bolt of the spring-latch and passing through the guide, whereby the shafts, thills, or tongue may be lowered, when desired, by a pull on the cord. Furthermore, the combination, with an axle provided with a latch, of the shaft, thill, or tongue provided with an arm adapted to engage the latch when the shaft, thill, or tongue

is in an elevated position. Furthermore, in the shaft, thill, or tongue a curved arm secured thereto, an axle, a plate secured to the under side of the axle by a clip and having one of its sides formed into a barrel or casing, a spring located in the barrel or casing, and a bolt capable of limited movement in the barrel or casing and acted upon by the spring, the tendency of which is to force the bolt into an extended position; and, finally, in various novel details of construction, whereby the foregoing objects are attained and the device rendered positive and reliable.

In the accompanying drawings, forming part of this specification, and in which like letters of reference designate corresponding parts, Figure 1 is a perspective view of a shaft-holder embodying my improvements, the shaft being in its normal position. Fig. 2 is a transverse sectional view of the same with the shaft in an elevated position. Fig. 3 is a plan view of the bottom of the shaft-holder, illustrating the latch mechanism and the means employed to disengage the latch.

In the accompanying drawings, A designates the shaft or thill, having on its lower side the shaft-strap B, secured to it by bolts and nuts or similar means. The shaft or thill is connected to the axle C by means of the shaft-strap B, which is hinged to two projections, d d' , of the clip D. On the upper side of the shaft or thill A is provided a curved arm, E, which is first bent upward and then backward in a horizontal direction. The lower end, e , of the curved arm E is spread out and made to conform to the configuration of the upper surface of the shaft or thills A, to which it is fastened by means of a bolt passing through the lower end, e , the shaft or thill A, and the shaft-strap B. The upper end, e' , of the curved arm E is flattened and the under side of it as it approaches the edge is inclined, making the end e' wedge-shaped. A hole, e^2 , is punched or otherwise formed in the end e' for the reception of a bolt, G, hereinafter to be fully described.

It is obvious that a depression or concavity might be made in the bottom of the wedge-shaped end e' for the reception of the bolt G without departing from the spirit of my invention; but I prefer, as illustrated in the draw-

ings, that the hole e^2 should extend entirely through the wedge-shaped end.

A plate, F, is fastened to the axle C by means of a clip, D, which has formed on one side, (the side to which the shaft or thill A is connected.) two small projections, d and d' , between which the ends of the shaft strap B are hinged by a bolt which passes through holes in the projections d and d' and through the end of the shaft-strap B, which is formed to receive it. The threaded ends of the clip D, which surrounds the axle A, pass through holes provided for their reception in the plate F, that is secured to the clip by nuts, which take upon the threaded ends. One side of the plate F is constructed to form a barrel or casing, f , adapted to receive a bolt, G, and a spiral spring, H, the whole forming a spring-latch. The barrel or casing f is slotted at f' , and in this slot slides a pin, g , which is fixed to the bolt G and has an eye formed in its outer end. This pin g , working in the slot f' , limits the movement of the bolt G. The length of the movement is regulated by the length of the slot.

In the back of the barrel or casing f is placed a spiral spring, H, which bears upon the bolt G and keeps it in an extended position. A small guide, f^2 , is fixed to the rear of the barrel or casing f , and through this guide passes a cord, wire, or the like, I, which is tied or otherwise secured to the eye of the pin g , whereby, when desired, the latch may be withdrawn by a pull on the cord I.

When the vehicle is not in use and it is desired that the shafts or thill should be elevated and out of the way, they are raised and the outer end, e' , of the curved arm is brought in contact with the spring-latch and the bolt G engages the hole e^2 and locks the curved arm E, which thereby retains the shafts or thills in an elevated position. As soon as it is desired to lower them, the bolt G is pulled back and out of engagement with the hole e^2 by means of the cord I.

From the foregoing it will be clearly seen that a shaft-holder of the described construction will be compact, strong, and durable, and will, when the shafts or thills are raised, automatically lock them in an elevated position and hold them there until it is desired to release them.

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

1. A shaft-holder comprising a curved arm, one end of which being suitably connected to the shaft, thill, or tongue, the other end being wedge-shaped and having a depression, concavity, or hole, and a spring-latch secured to the axle or running-gear and adapted to be engaged by the curved arm, whereby when the shafts or thills are raised they will be held in an elevated position, substantially as described.

2. A shaft-holder comprising an arm, one end being suitably connected to the shaft or thill, the other end being provided with a depression, concavity, or hole, a latch fastened to the axle and adapted to be engaged by the arm, a guide located at the rear of the latch, and a cord, wire, or the like secured to the bolt of the latch and passing through the guide, whereby the bolt may be withdrawn from engagement with the arm by a pull on the cord, wire, or the like, substantially as and for the purpose described.

3. The combination, with the axle provided with a latch on its rear side, of the shaft, thill, or tongue having a curved arm adapted to pass over the axle and engage the latch when the shaft, thill, or tongue is in an elevated position, substantially as set forth.

4. In a shaft-holder, the combination, with the axle and the shaft or thill mounted thereon and having the curved arm E, provided with a hole, socket, or depression, of the plate secured to the axle and having a barrel or casing, f , the bolt mounted in the said barrel or casing and adapted to engage the hole, socket, or depression in the arm E, and the spring disposed in the barrel or casing in rear of the bolt and adapted to normally hold it extended, substantially as specified.

5. In a shaft-holder, the combination, with the axle and the shaft or thill mounted thereon and carrying a rigid arm provided with a hole, socket, or depression, of the plate F, attached to the axle, the spring-actuated bolt mounted thereon and adapted to engage the hole, socket, or depression in the said arm, and the cord, wire, or the like connected to the bolt, substantially as and for the purpose specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

GEORGE JOSEPH SPENNEBERG.

Witnesses:

JAMES G. GOSHE,
ERNEST C. SMITH.