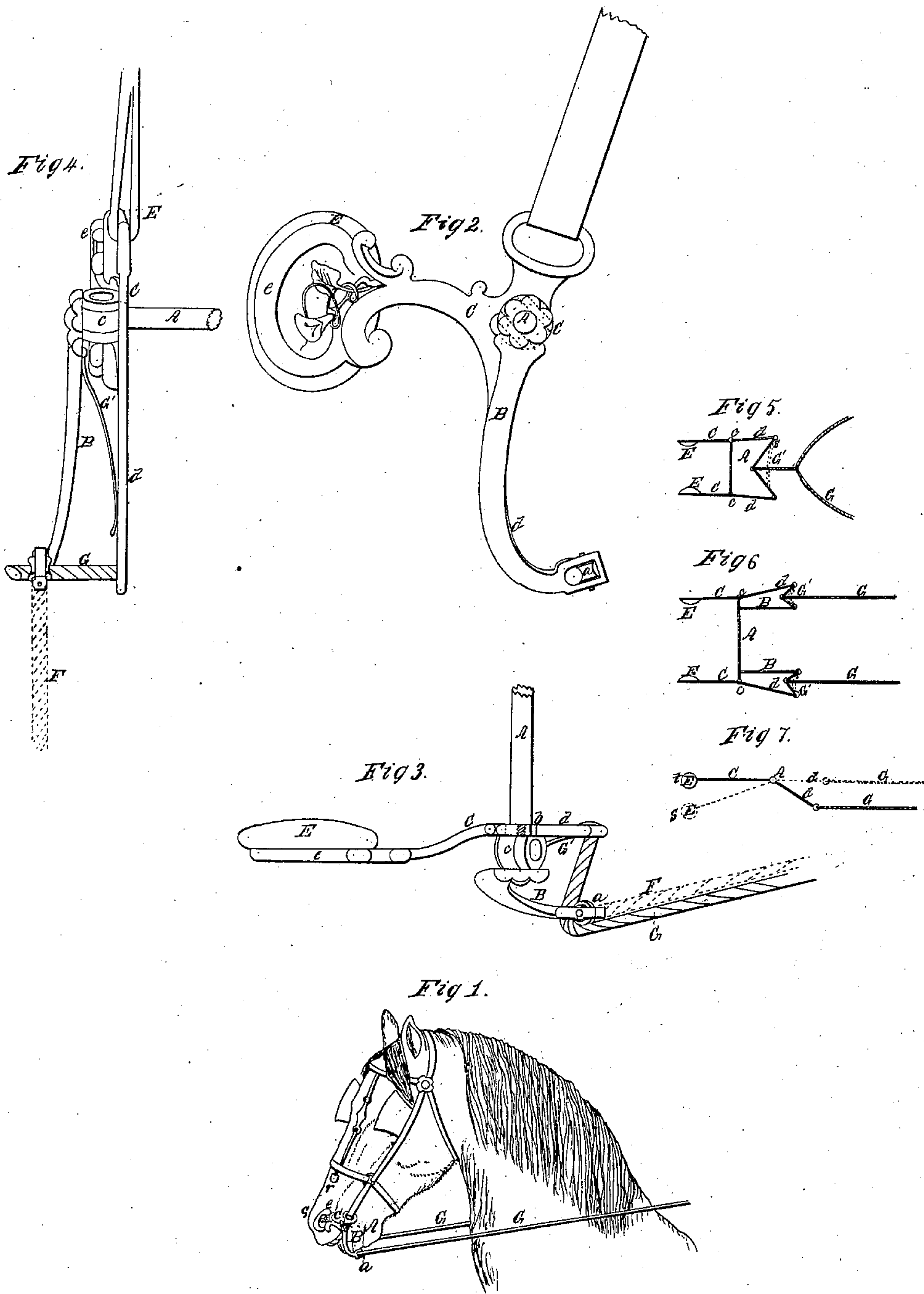


Titus & Fenwick,

Bridle Bit,

Nº 12,397.

Patented Feb. 13, 1855.



UNITED STATES PATENT OFFICE.

WM. D. TITUS AND ROBT. W. FENWICK, OF BROOKLYN, NEW YORK.

BRIDLE-BIT.

Specification of Letters Patent No. 12,397, dated February 13, 1855.

To all whom it may concern:

Be it known that we, W. D. TITUS and R. W. FENWICK, of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Bits for Stopping Runaway Horses, which we denominate the "Irresistible Bit;" and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a perspective view of a horse's head with our invention arranged upon its nose. Fig. 2, is a side elevation of the invention enlarged and removed from the horse's nose. Fig. 3, is a top or bird's eye view of the same. Fig. 4, is a back view of the same. Figs. 5, 6, and 7, show modifications of the means employed for causing the padded levers or arms to exert pressure upon the nose of the horse.

Similar letters of reference in each of the several figures indicate corresponding parts.

This invention relates to the government of horses under the saddle or in harness and is designed to lessen the danger in riding horseback or in driving, it serving, most effectually, to put the most fractious and powerful horse under the immediate control of all classes of riders and drivers.

The nature of our invention consists in the application of pads to a bit, said pads being so arranged and controlled by a rein that at the pleasure of the rider or driver they may be made to close the horse's nostrils and thereby check respiration.

To enable others skilled in the art to make and use our invention we will proceed to describe its construction and operation.

A, represents the ordinary bit bar—made stiff and of the proper shape to fit the horse's mouth.

B, B, Figs. 1, 2, 3, 4 and 6, are two stationary arms attached to the extreme end of the bit bar as shown; these arms extend back some distance and have friction pulleys *a*, secured in their ends.

C, C, are the padded levers their ends *d*, *d*, are very similar in form to the ordinary curve bit. These levers are attached to the bit bar A by joints *c*, *c*, and fitted so as to play loosely in and out on the same, a slot *b*, being provided in each of the levers C, C, to allow for said movements. E, E, are the

pads fitted on the front ends *e*, *e*, of the levers C, C; these pads fit snugly against the sides of the horse's nose and when in operation press inward upon the same and close his nostrils and thereby check respiration.

F, is the driving or riding rein and G the rein, for operating the padded levers; the driver's rein is attached to the back ends *d*, *d*, of said levers and carried in a straight line to the driver or rider; and the operating rein G, carried laterally outward, then around the friction pulleys *a*, *a*, and thence to the rider or driver as illustrated in the drawing. Owing to the rein G, being thus arranged the ends *d*, *d*, of the padded levers C, C, are caused to move from each other when the driver or rider pulls upon the rein, and the padded ends *e*, *e*, consequently to move inward toward each other and to close tightly upon the horse's nose and check his respiration.

G', G', are springs placed between the arms B, B, and levers C, C; these springs serve for always instantly removing the pressure of the pads from the nostrils whenever the driver or rider slackens the rein. By providing these springs the utility of the bit is greatly enhanced as there is not the least danger, when they are used, of the pads keeping the horse's nostrils closed too long. These springs might serve another important purpose if made strong and sufficiently elastic, viz: preventing the pads being operated when the rider only exerts slight strain on the rein. In this case the use of a separate rein F, for driving or riding with might be dispensed with.

By examining Fig. 5 another method of throwing the pads into operation will be seen. In this view toggle levers, attached to the ends *d*, *d*, of the levers C, C, and arranged under the horse's neck near his mouth, are employed, said levers being made to operate upon the pads and throw them into operation by being drawn in line with each other through the agency of the rein F; and also made to throw them out of operation as soon as said rein is slackened, by the spring, G.

In Fig. 6 the same arrangement as that seen in Figs. 1, 2, 3 and 4, with a slight modification is shown. Toggle levers for aiding the driver or rider in operating the pads being employed.

Fig. 7 shows an arrangement quite different from those described and yet embracing the gist of our invention to wit: The closing of the horse's nostrils by pressure applied through pads which are operated by the driver or rider through the rein. The said arrangement consists in so constructing and arranging the bit and pads that the latter shall, when the rein is drawn taut, be caused to descend from the position shown in full red lines to the position shown in dotted red lines, and owing to the horse's nose being larger at the point *s*, than at the point *t*, to exert pressure sufficient to close his nostrils and check respiration and thereby cause him to stop or yield to the rider or driver. As soon as the speed of the horse is checked the rein is slackened and the pads thrown upward by a spring.

This bit is quite ornamental and adds greatly to the appearance of the horse. It

also dispenses with the use of a "hard bit" which irritates and often tears the horse's mouth. And withal will be the means of saving the lives and property of those riding and driving.

What we claim as our invention and desire to secure by Letters Patent is—

The within described improvement in bits for stopping runaway horses, consisting in the application of pads so arranged and controlled by a rein that at the pleasure of the rider or driver they may be made to close the horse's nostrils and thereby check respiration as herein set forth.

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Witnesses:

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