W. D. Andrews,

Driving Reins.

No. 67,837. Patented Aug. 20, 1867.

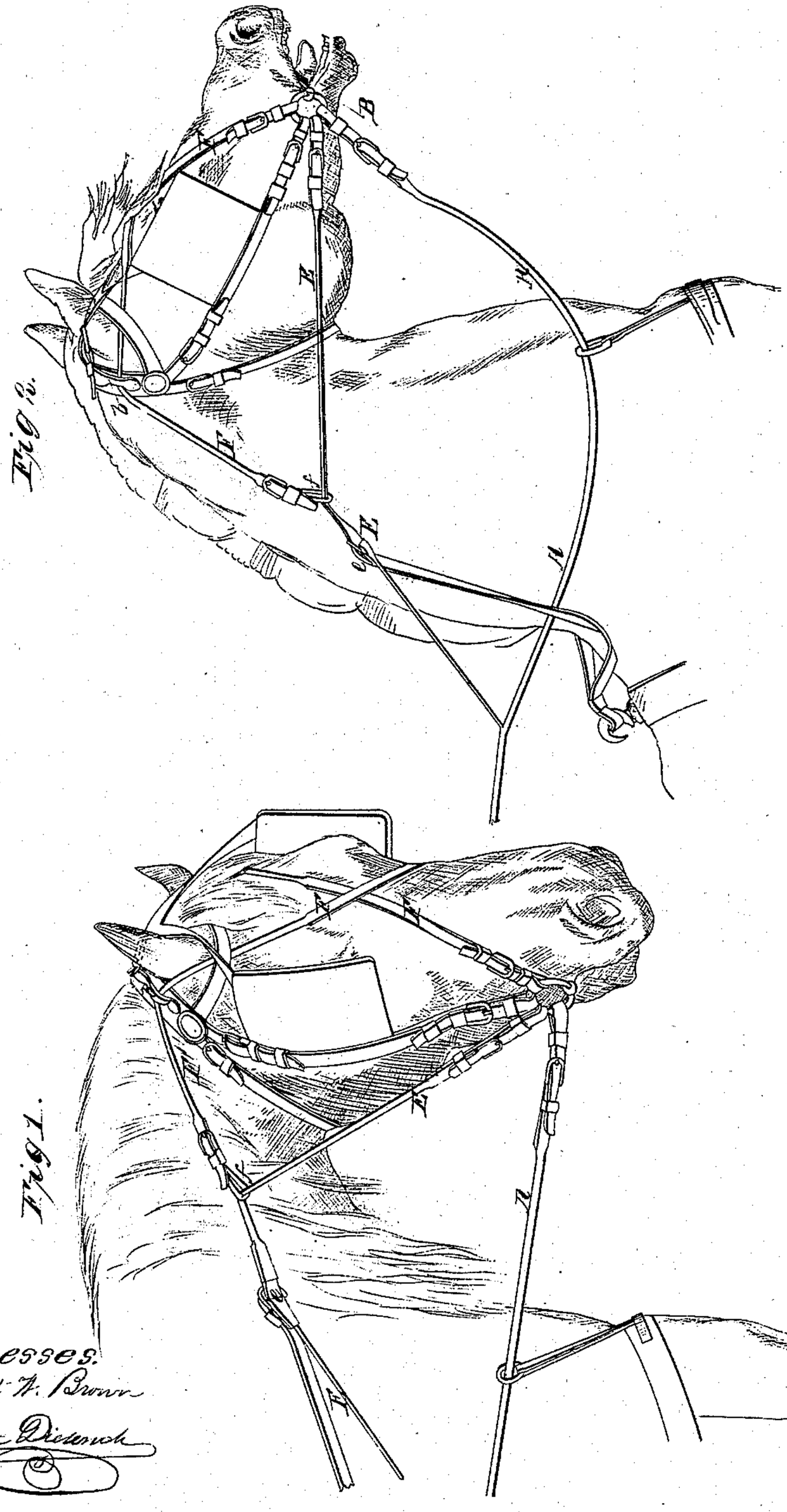

Fig. 2.

Fig. 1.

Witnesses:

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United States Patent Office.

WILLIAM D. ANDREWS, OF NEW YORK, N. Y.

Letters Patent No. 67,837, *dated August* 20, 1867.

IMPROVEMENT IN BRIDLE-REINS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, W. D. ANDREWS, of the city, county, and State of New York, have invented a new and improved Combination Bridle and Reins; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figures 1 and 2 show the head of a horse provided with my improved combination bridle and reins, together with the ordinary head-stall, blinders, and bit, but in the one figure with the horse's head in its natural position or at a state of rest, and in the other with the head thrown or drawn up by the action of the safety-reins in my improved combination.

The object of this invention is to produce such a combination of bridle and reins, in the harnesses to horses more particularly, as to secure a safe driving and riding of horses, and their more effectual and perfect control.

A, in the drawings, represents the ordinary driving-reins attached to the bit B and carried back through the martingale and terret rings to the carriage in the usual manner. E, the auxiliary safety-reins, each rein of which is usually made in two parts and united by a buckle at *e*. These reins are attached to the bit B and carried back through the eyes, loops, or pulleys *f*, at the rear end of reins F, and from thence to the terret-ring to the carriage, either independently or encased within and working freely through the driving-reins A. The reins F are attached to the bit B in the usual manner, and carried up and across the horse's nose, over his head, through eyes, loops, or pulleys *b* affixed to the top of the head-stall a short distance above and from the ear, terminating in loops, eyes, or pulleys *f* a short distance behind the ear. These loops, eyes, or pulleys *f*, as the case may be, are secured to the reins F by buckles, so that they can be adapted to horses' heads of different sizes. In lieu of carrying the reins F across the nose and over the head they may be carried directly up from the bit upon the side of the head, through suitable eyes, loops, or pulleys secured to the sides of the head-stall just below the ear, but I prefer the crossing of the said reins F over the horse's nose, as was first described, as by it the horse's head is placed in a position where he has the least power of resistance. For the use of equestrians the reins F may be made considerably longer than the length hereinabove described, so that their loops *f* will reach to a point about half way between the ear and the martingale-rings, and in that case the safety-reins E are carried from the loop *f* to and through martingale-rings, and thence to the driver's hand. In lieu of forming a loop on lines F, at *f*, I make the line E with a loop at or forward of point *f*, through which I carry line F and extend it thence back to the rider's hand. The same arrangements used for riding may also be used for driving, if preferred, their effects being nearly identical. For a more neat appearance of the harness it is best to enclose the safety-reins within the ordinary driving-reins, they entering them at a point just forward of the terret-rings and issuing from them at a point near the driver's hand, but for convenience of detaching it is better to make them independent of each other, connecting them together temporarily at or near the driver's hand, so that the pressure may be readily and quickly transferred from one to the other. For convenience in handling and using the safety-reins they are to be provided with a series of loops, through those of which, in the proper position, one or more fingers may be inserted when driving, so that by exerting a slight pressure it will cause them to act as a check to keep the horse's head in any desired position and upon any sudden emergency enable the pressure to be quickly transferred from the driving to the safety-reins. If desired to have a fixed check, a bearing-rein may be attached to the safety-reins E at points just back of loops *f*, by buckles or otherwise, and used in the ordinary manner, but as I deem the fixed bearing-rein to be not only unnecessary but detrimental, I use only a very loose check, attached as stated above, on which no bearing is permitted while the horse is travelling, its use being merely to control the horse's head when stopping sufficiently to prevent the entanglement of his feet with the reins, the rubbing and injuring of the bridle, harness, etc. In the use of my improved combination of bridle and reins hereinabove described, the person driving takes the ordinary driving-reins in hand and works them in the usual manner, while at the same time he inserts one or more fingers into one of the loops on each of the safety-reins, so that should he wish to use them as a check he exerts sufficient pressure upon them to raise the horse's head to the desired position. If the horse be a confirmed puller, or from unusual spirits, fright, or other cause exerts an unpleasant pressure upon the driving-reins, or shows symptoms of kicking, the driver, by then transferring the pressure to and by a direct pull on the safety-reins, can raise the bit upward in the horse's mouth toward the loops *f* with a force just equal to that applied

by him, as by the indirect pull communicated from reins E to reins F, through the interposition of the loop or pulley *f*, the bit is raised in the mouth and made to press against the upper jaw with a force double that applied by the driver, and thus will raise and bring the nose and head of the horse to a position somewhat similar to that shown in fig. 2 of the drawings. With the head of the horse in the position above stated the muscles of the neck are to a considerable extent rendered powerless, and thus the horse unable to exert any considerable pressure upon the bit to that produced by the pressure upon the safety-reins. The horse can neither kick, back, nor go forward except at the driver's option, thus bringing him to a complete and perfect state of control and subjection, while at the same time no impediment is offered to his breathing, which is the case when the head is drawn toward the body, as with the use of the ordinary driving-reins, and to a greater or less extent with many of the styles of safety-reins now in common use. My improved safety-reins can be used for guiding the horse with the same or greater facility than the ordinary driving-reins, and as the pressure of them is transferred mainly to the upper jaw a new bearing is produced in the mouth, which of itself will in many cases prevent a horse from pulling; and by my invention, if a horse is in the habit of pulling on one rein, as the pressure to guide him is exerted at both ends of the bit at the same time, the bit is thus kept square in the mouth, which, being a change of action, will often effect a cure. In double harnesses the two auxiliary or safety-reins on each horse are united in one over the base of the horse's neck, and from thence carried back to the driver's hand either independently or through the long double rim in the same manner as in the single reins, the safety-reins in double harnesses only being used for checking and stopping the horses, their guidance being entirely secured with the ordinary driving-reins.

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

The safety, riding, or driving-reins E, whether the same be made separately from or are enclosed and move freely within and through the ordinary driving-reins A, or whether with or without the check-rein attached, as described, when the said reins are combined with, arranged, and attached to the reins E in the manner and arranged so as to operate as described and for the purposes specified.

WM. D. ANDREWS.

Witnesses:

WM. F. MCNAMARA,

ALBERT W. BROWN.