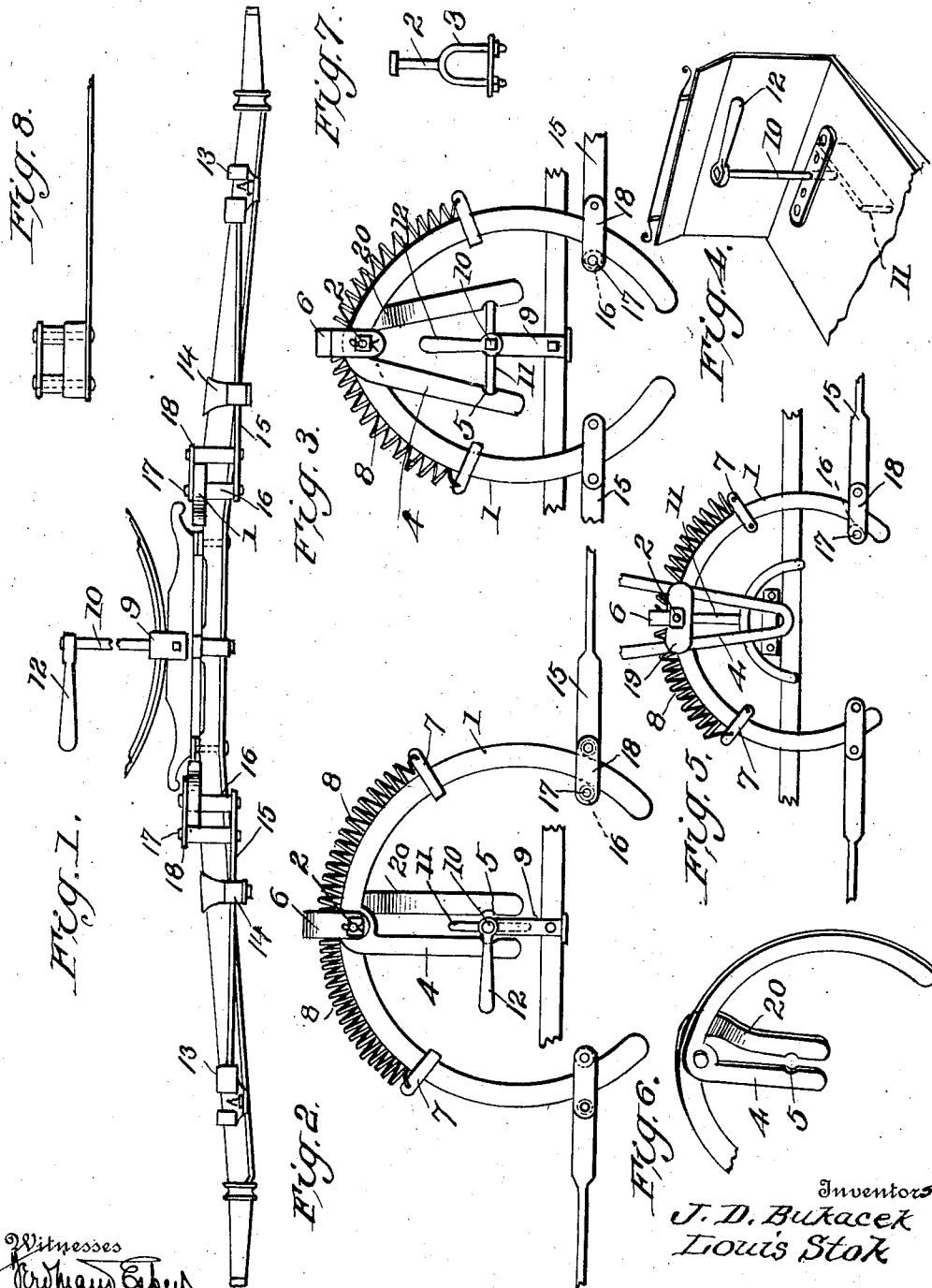


J. D. BUKACEK & L. STOK.
 SHAFT OR POLE DETACHER.
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1,049,664.

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Witnesses
Richard E. Epp
W. J. Jordan

Inventors
J. D. Bukacek
Louis Stok

W. J. Jordan, Attorneys

UNITED STATES PATENT OFFICE.

JOHN D. BUKACEK AND LOUIS STOK, OF HOWELL, NEBRASKA.

SHAFT OR POLE DETACHER.

1,049,664.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that we, JOHN D. BUKACEK and LOUIS STOK, citizens of the United States, residing at Howell, in the county of Colfax and State of Nebraska, have invented certain new and useful Improvements in Shaft or Pole Detachers, of which the following is a specification.

This invention has relation to shaft or pole detaching devices adapted to be used upon buggies, carriages, etc., and has for its object to provide a simple means permanently attached to the vehicle which may be easily and quickly operated to detach the shafts or pole in case the animal or animals should run away, thereby liberating the animals from the vehicle and possibly preventing serious accident.

The device may also be used when it is desired to remove a pair of shafts and substitute a pole for the same, or vice versa. In fact, the device may be used at any time when it is desired to disconnect the shafts or pole from the vehicle.

For a full understanding of the invention, reference is to be had to the following description and accompanying drawings in which:

Figure 1 is a front elevation of the front axle of the running gear with the detacher applied. Fig. 2 is a top plan view of the intermediate members with the detacher showing the parts in one position. Fig. 3 is a similar view showing the parts in another position. Fig. 4 is a perspective view of the forward part of the body of a vehicle showing the operating shaft located thereon. Fig. 5 is a plan view of the intermediate parts of the detacher showing the same applied to a double reach pole. Fig. 6 is a perspective view of one of the members of the detacher and a portion of the other member. Fig. 7 is a detail view of a pivot bolt used upon the detacher. Fig. 8 is a detail view of a modified form of rod which may be used in the detacher.

Corresponding and like parts are referred to in the following description and indicated in all the views of the accompanying drawings by the same reference characters.

As illustrated in the accompanying drawing, the detacher includes two circular irons 1. These irons are bent or formed on the same arc and are pivotally connected together and normally lie approximately concentric with relation to the fifth wheel of the

vehicle to which the device is applied. These irons are pivotally connected together by a pivot bolt 2 which is provided at its lower end with a clip 3 adapted to receive the reach pole of the vehicle when a single reach pole is used. The irons 1 are provided at their inner or rear ends with straight sections 4 which are disposed as chords with relation to the arcs of the body portions of the irons 1. These sections 4 normally lie approximately parallel with relation to each other and extend forwardly from the pivot bolt 2. The sections 4 are provided at their inner sides and in the vicinity of their forward ends with notches 5. A guide clip 6 is mounted upon the pivot bolt 2 and lugs 7 are secured to the irons 1 at points between the ends of the arcs thereof. A coil spring 8 is connected at its ends with the lugs 7 and its intermediate portion passes through the guide clip 6. This spring 8 is under tension and has a tendency to hold the sections 4 toward each other and in parallel relation and the irons 1 in concentric positions with relation to the fifth wheel of the vehicle. The forward parts of the irons 1 extend transversely across the front axle of the vehicle which is pivotally connected with the running gear in the usual manner.

A clip 9 is fixed to the lower part of the front spring of the vehicle and extends rearwardly over or between the forward end portions of the sections 4. A shaft 10 passes through the clip 9 and is supported thereon and is provided at its lower end with a plate 11 which lies between the sections 4 of the irons 1. The shaft 10 passes up through the floor of the body of the vehicle and is provided at its upper end with a handle 12 which normally lies in close proximity to the dash board. The plate 11 is secured to the shaft 10 at a point midway between its ends, and said plate is disposed at right angles to the handle 12 so that when the handle 12 is approximately parallel with the dash board the plate 11 is approximately parallel with the sections 4.

Coupling members 13 are mounted at the end portions of the front axle and guides 14 are mounted upon the front axle just beyond the outer edges of the irons 1. Rods 15 are slidably mounted in the guides 14 and the coupling member 13, and each rod 15 is provided at its inner end with a pair of spaced rollers 16 mounted on pins 17 which are connected together at their upper

ends by plates 18. The irons 1 pass through the spaces between the members of the pairs of rollers and are also located between the plates 18 and the inner ends of the rods 15. The coupling members 13 are adapted to receive the thill members usually provided upon shafts or pole frames, and the outer portions of the rods 15 normally serve as the pivots for the thill couplings in the usual manner. Therefore, it will be seen that when the shaft 11 is turned by using the handle 12 the plate 11 will swing around so that its ends will bear against the inner sides of the sections 4 and spread the said sections apart until the ends of the plate 11 enter the notches 5. As the sections 4 are moved as above indicated the forward ends of the irons 1 will be swung toward each other against the tension of the spring 8, and thus the rods 15 will be drawn toward each other and their outer ends will be withdrawn from the thill irons, and thus the shafts or pole are detached from the front axle of the vehicle. As soon as the handle 12 is turned back into parallel relation with the dash board of the body of the vehicle, the tension of the spring 8 comes into play and the irons 1 are swung upon the pivot bolt 2 to their normal positions and the outer ends of the rods 15 are projected across the coupling members 13. This takes place when the shafts or pole frame are connected with the axle of the vehicle.

When the vehicle is provided with a double reach pole the pivot bolt 2 is mounted upon a plate 19 which in turn is connected with the duplicate members of the said pole.

As illustrated in Fig. 6 one of the irons 1 is distorted at its rear end and the other iron is pivoted to the distortion. The section 4 of the last-mentioned iron is then bent up as at 20 so that the sections 4 lie approximately in the same horizontal plane.

With such an appliance it will be obvious that should the animals attached to the ve-

hicle become fractious or run away the shaft 10 may be turned so that the animals together with the shafts or pole are quickly detached from the vehicle, and therefore the danger incident to runaway accidents is in a great measure eliminated. Also the device may be used for easily and readily connecting or disconnecting the shafts or pole as herebefore indicated.

Having thus described the invention, what is claimed as new is:

1. A device for disconnecting a draft appliance from a vehicle comprising arcuate irons pivotally connected together and pivotally mounted upon the vehicle, said irons having straight sections which normally lie approximately parallel with each other, a spring connected with the irons and adapted to hold them in normal positions, means engageable with the straight sections and adapted when operated to spread the same apart, and rods slidably mounted and engaging the irons and normally serving as the connecting means between the draft appliance and the vehicle.

2. A device for disconnecting a draft appliance from a vehicle comprising arcuate irons pivotally connected together and pivotally mounted upon the vehicle, said irons having at their inner ends straight sections which normally lie approximately parallel, a shaft journaled upon the vehicle and carrying at its lower end a plate which lies between the straight sections of its irons, a spring connected with the irons and holding them in normal positions, and rods slidably mounted and engaging the irons and normally serving as means for connecting the draft appliance with the vehicle.

In testimony whereof we affix our signatures in presence of two witnesses.

JOHN D. BUKACEK.
LOUIS STOK. [L.S.]

Witnesses:

FRANK V. FIALA,
ANTON RYSÄVY.