

(No Model.)

F. J. SHEPHARD.
HORSE DETACHER.

No. 446,649.

Patented Feb. 17, 1891.

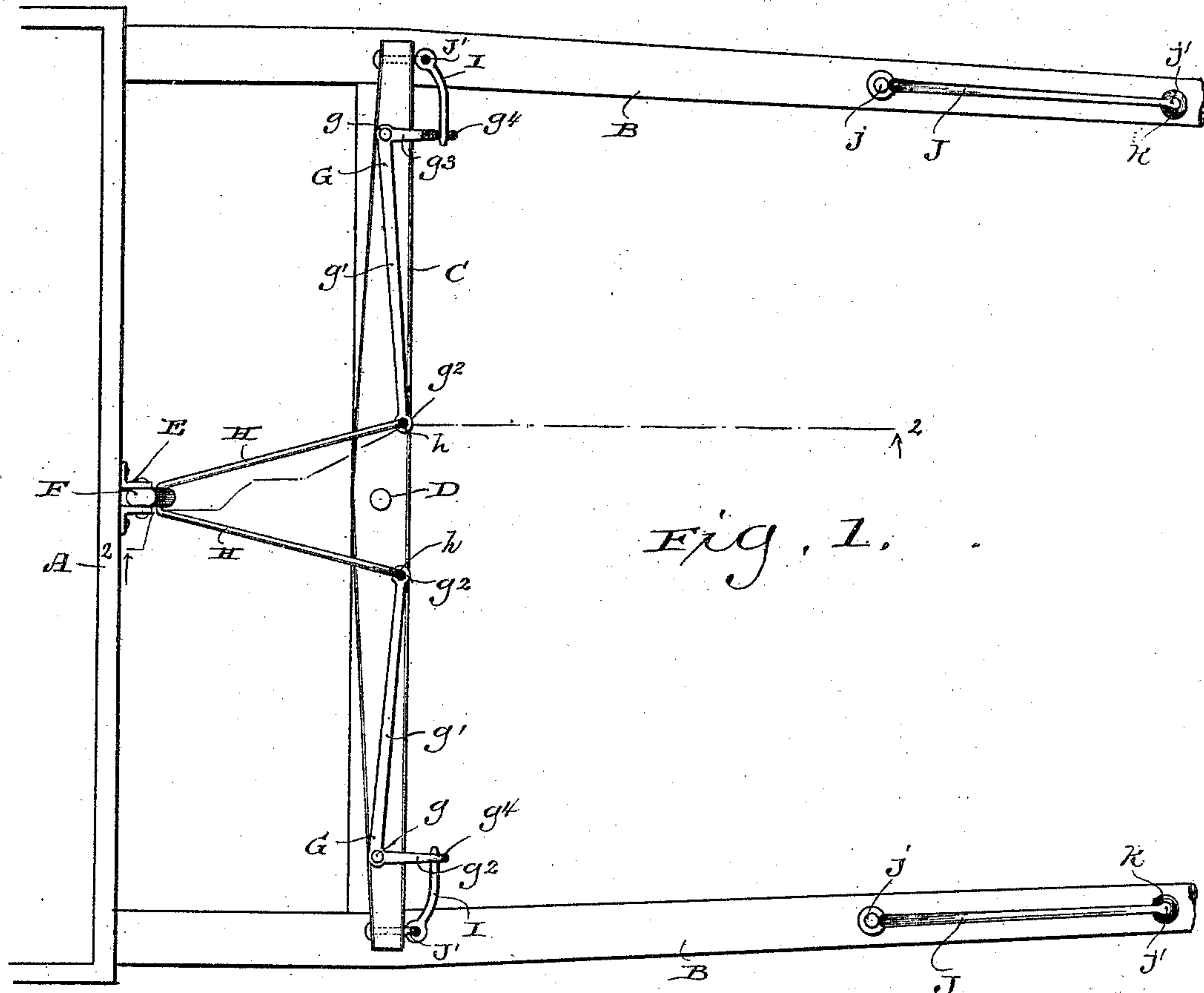


Fig. 1.

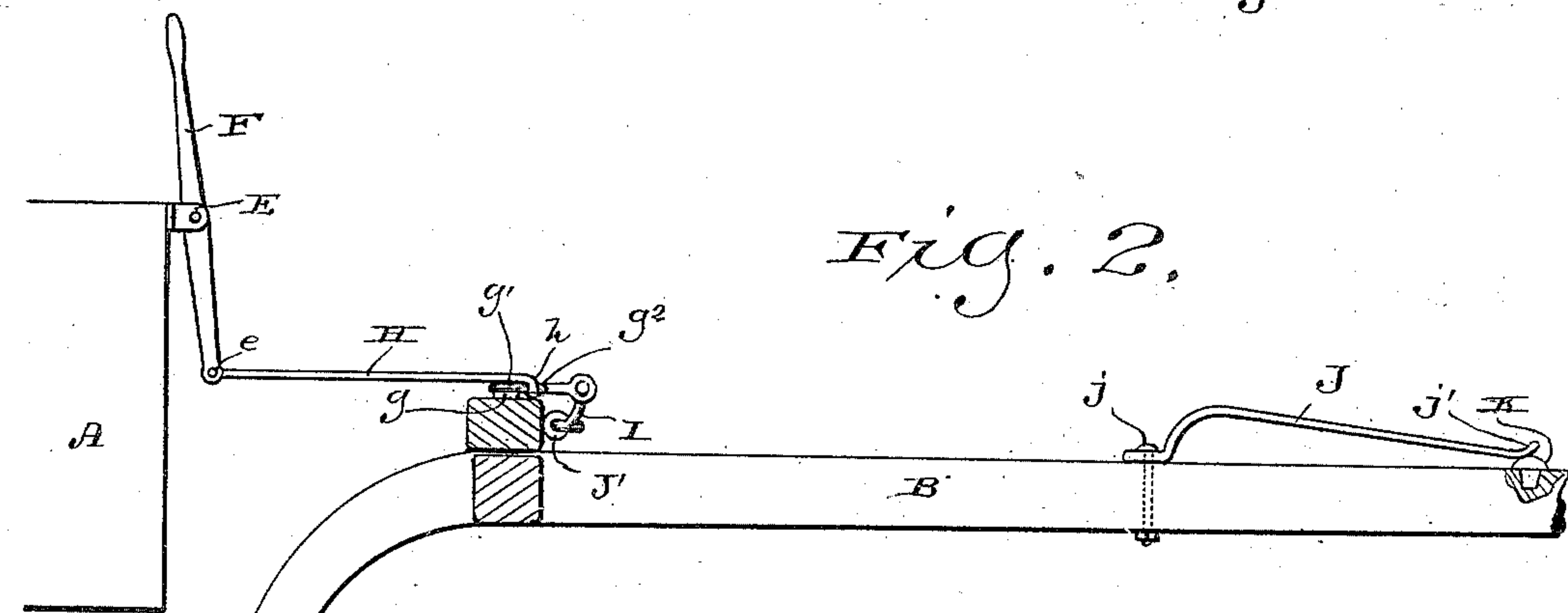


Fig. 2.

Witnesses
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UNITED STATES PATENT OFFICE.

FRANCIS J. SHEPHARD, OF CONCORD, WISCONSIN.

HORSE-DETACHER.

SPECIFICATION forming part of Letters Patent No. 446,649, dated February 17, 1891.

Application filed October 29, 1890. Serial No. 369,739. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS J. SHEPHARD, a citizen of the United States, and resident of Concord, in the county of Jefferson, and in the State of Wisconsin, have invented certain new and useful Improvements in Horse-Detaching Devices; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to appliances for detaching horses from the vehicles to which they are harnessed; and it consists in certain peculiar and novel features of construction and arrangement, as hereinafter described, and pointed out in the appended claims.

In order that my invention may be fully understood, I will proceed to describe it with reference to the accompanying drawings, in which—

Figure 1 is a plan view of the front portion of a vehicle with my improved horse-detacher applied thereto. Fig. 2 is a vertical longitudinal section of the same on the line 2 2 of Fig. 1.

The object of my invention is to produce a mechanism whereby in the event of a runaway the horse can be instantly released from the vehicle, so that all danger to the occupants of the vehicle shall be avoided. This result I attain by virtue of the construction which I will now proceed to describe.

Referring to the drawings, A designates the front end of the vehicle-body; B B, the shafts; C, the cross-bar, and D the singletree. These parts may be of the usual or any preferred form and construction.

Upon the front end of the body A is secured a hanger of bracket E.

F designates a hand-lever, which is pivoted midway of its length upon the bracket or hanger E.

G G designate two bell-crank levers, each of which is pivoted at g upon the outer end of the singletree D. The inner ends of the longer arms g' of these bell-crank levers are formed with eyes g^2 , and the outer ends of the shorter arms g^3 of said levers are formed with hooks, rings, or eyes g^4 .

H designates a V-shaped rod, the bend of which passes through an eye e in the lower

end of the lever F, and the front ends of which are bent downward, as shown at h , to enter the eyes g^2 .

I I designate a pair of trace-pins, each of which is hinged at its outer end in a ring-bolt J' , which in turn is secured to the outer extremity of the singletree D. The inner ends of these trace-pins extend into the eyes g^4 of the bell-crank levers G, and said trace-pins I are designed to receive the cockeyes of the traces.

From the above description it will be seen that in the event of a runaway the driver throws the upper end of lever F forward. This draws the inner arms g' of the bell-crank levers inward and slips the inner ends of the trace-pins I out of the eyes g^4 of said bell-crank levers and detaches the traces.

Upon each shaft B is secured a spring-arm J for retaining the breeching. The rear ends of these arms are attached, as shown, to the upper sides of the shafts by bolts j , and their front ends press downward upon studs K, also secured to the upper sides of the shafts; and it will be seen that when the traces are detached, as above described, the breeching-straps will readily slip off of the spring-arms J, but that ordinarily the breeching-straps will be prevented from slipping off of the arms J, owing to their spring-pressure upon the studs K. The outer ends of said arms are preferably curved upward, as shown at j' , to facilitate the insertion of the breeching-straps.

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

1. In a horse-detacher, the combination, with a pair of hinged trace-pins designed to receive the cockeyes of the traces, and a pair of pivoted bell-crank levers having eyes to receive the free ends of the trace-pins, of a hand-lever pivoted upon the vehicle-body and attached at its lower end to the inner ends of the bell-crank levers, substantially as described.

2. In a horse-detacher, the combination, with a pair of hinged trace-pins designed to receive the cockeyes of the traces, of a pair of pivoted bell-crank levers having eyes to re-

ceive the free ends of the trace-pins, a bent
rod having the ends thereof in engagement
with the inner ends of the bell-crank levers,
and a hand-lever pivoted upon the vehicle-
5 body and attached at its lower end to the bend
of the said rod, substantially as set forth.

In testimony that I claim the foregoing I

have hereunto set my hand, at Milwaukee, in
the county of Milwaukee and State of Wisconsin,
in the presence of two witnesses.

FRANCIS J. SHEPHARD.

Witnesses:

H. G. UNDERWOOD,

WM. KLUG.