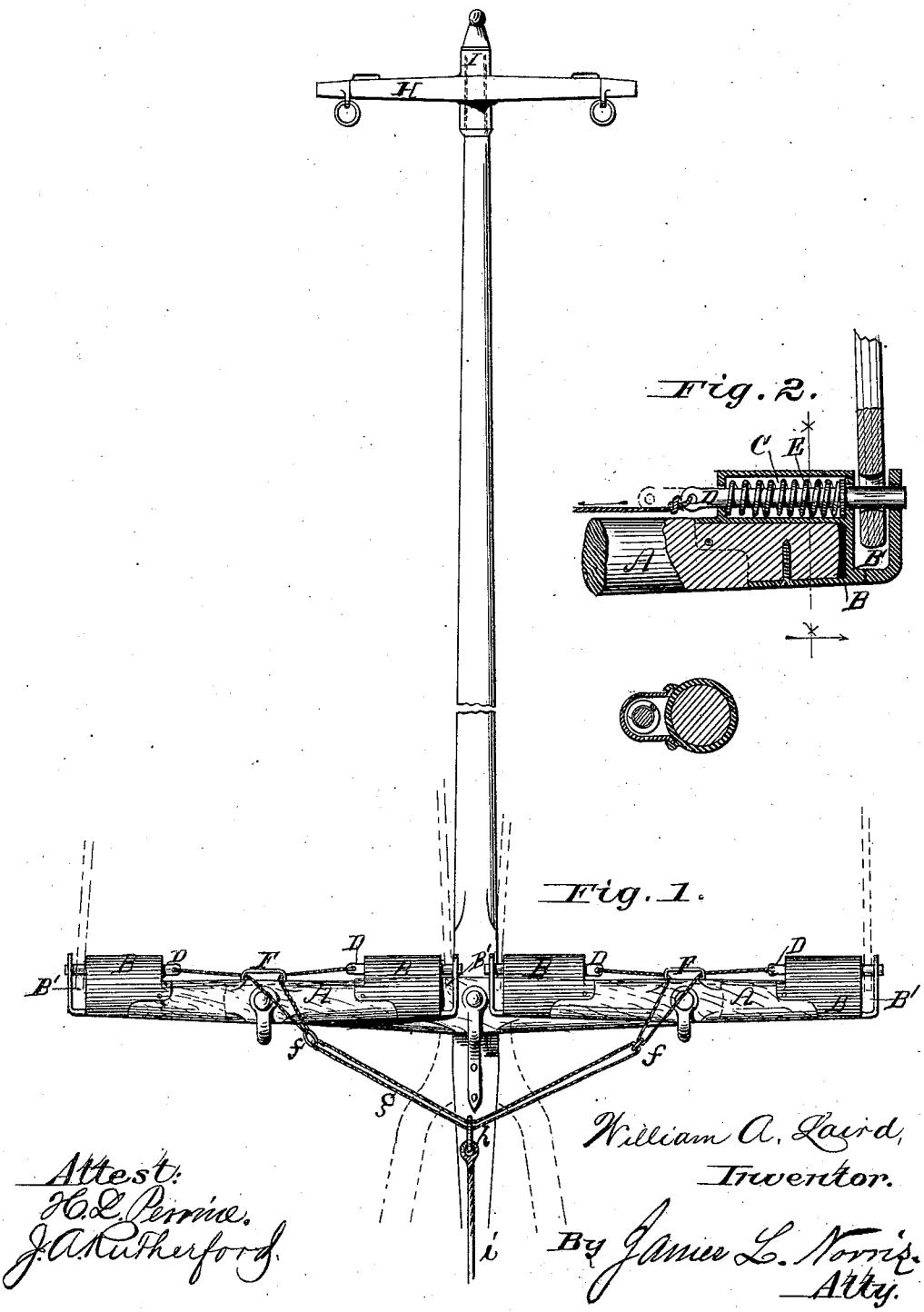
W. A. LAIRD.

Horse-Detacher.

No. 197,642. Patented Nov. 27, 1877.



Attest:
H. C. Perrie.
J. A. Rutherford.

William A. Laird,
Inventor.
By James L. Norris.
Atty.

UNITED STATES PATENT OFFICE.

WILLIAM A. LAIRD, OF OSSIAN, IOWA, ASSIGNOR OF ONE-HALF HIS RIGHT TO G. L. FAUST AND W. L. WARREN, OF SAME PLACE.

IMPROVEMENT IN HORSE-DETACHERS.

Specification forming part of Letters Patent No. **197,642**, dated November 27, 1877; application filed September 21, 1877.

To all whom it may concern:

Be it known that I, WILLIAM A. LAIRD, of Ossian, in the county of Winneshiek and State of Iowa, have invented certain new and useful Improvements in Whiffletrees for Vehicles, of which the following is a specification:

My invention relates to an improvement in trace-detaching devices for double-team vehicles; and consists in the combination, with spring trace-bolts upon the single-trees, of an arrangement of slip-joint cords extending back within reach of the driver, and by means of which both horses of a double team may, in case of danger, be readily and simultaneously released, in whatever direction the hand-cord leading to the vehicle may be pulled.

In the accompanying drawing, Figure 1 is a plan view of my invention, and Fig. 2 a longitudinal section of a spring trace-bolt such as I prefer to use in connection with my arrangement of cords.

The letter D designates the spring trace-bolts, one of which is placed at each end of the single-trees, and the two upon each single-tree are connected together by a single smooth cord, a loop of which is drawn through a staple, F, located about the middle of the single-tree. The two loops thus formed are provided with slipping rings *f f*, through which is passed a cord, *g*, the ends of which are connected to form a double loop, which is also encircled by a slipping ring, *h*, from which a hand or operating cord extends back to the body of the vehicle and within reach of the driver.

When the end *i* is pulled, as will be readily seen, the spring-bolts D will be retracted within their casings B and out of the eyes of the traces, thus detaching the horses.

If, as frequently happens in cases of runaway, the driver should be thrown from his seat and to one side of the vehicle, and pulls the cord *i* at an angle or away from the center of the body, the slipping of the rings *f* and *h* will cause an equalization of the strain upon all parts of the system of cords, so that the spring trace-bolts will be simultaneously retracted for releasing the horses.

If the several cords were rigidly connected, as is ordinarily the case, a pull on cord *i* in any direction but centrally would tighten the connections of one single-tree and slacken those of the other, so that only one horse would be released, and render a second pull necessary for releasing the other, and, in fact, the driver is frequently unable while his horses are running away to gain a position from which to operate the detaching devices, as heretofore constructed.

It will be understood that, with my invention and others of similar nature, a suitable hitching device must be used for attaching the team to the front end of the tongue, whereby the horses may become detached therefrom by simply moving forward after the traces are unhitched.

What I claim, and desire to secure by Letters Patent, is—

The combination of spring-bolts D D D D and their direct connecting-cords with staples F, rings *f f*, links *g*, ring *h*, and cord *i*, substantially as described.

WM. A. LAIRD.

Witnesses:
G. L. FAUST,
W. S. WARREN.