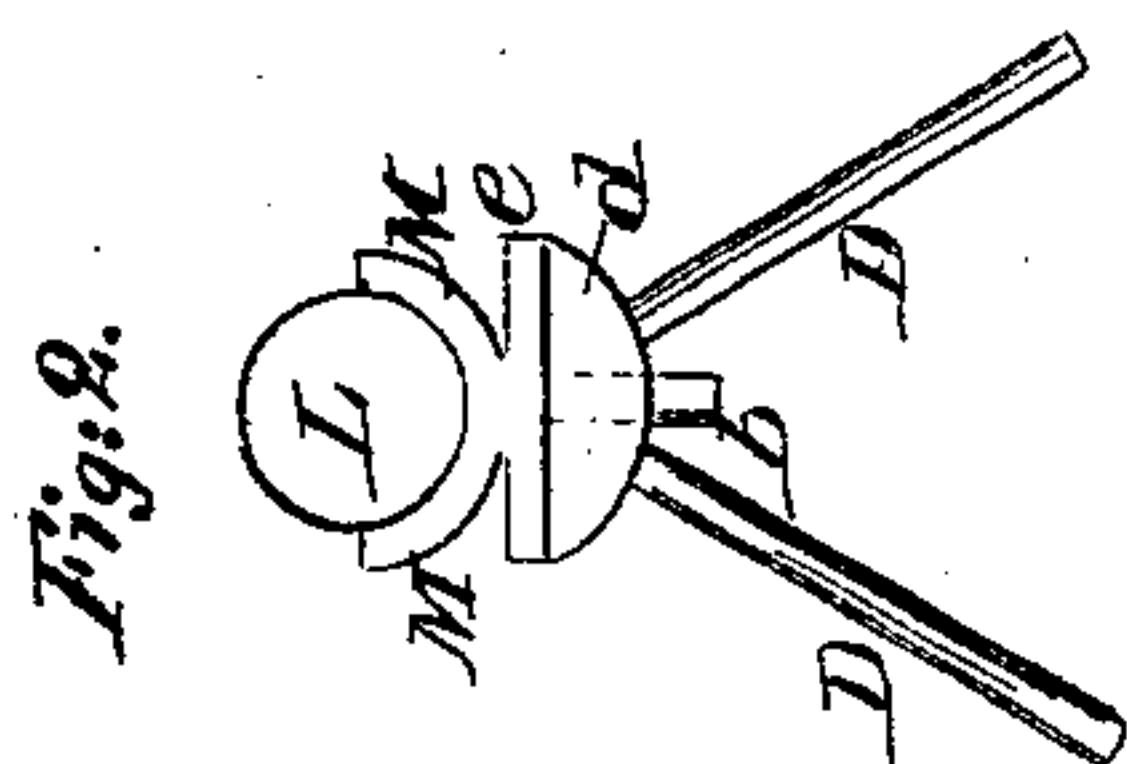
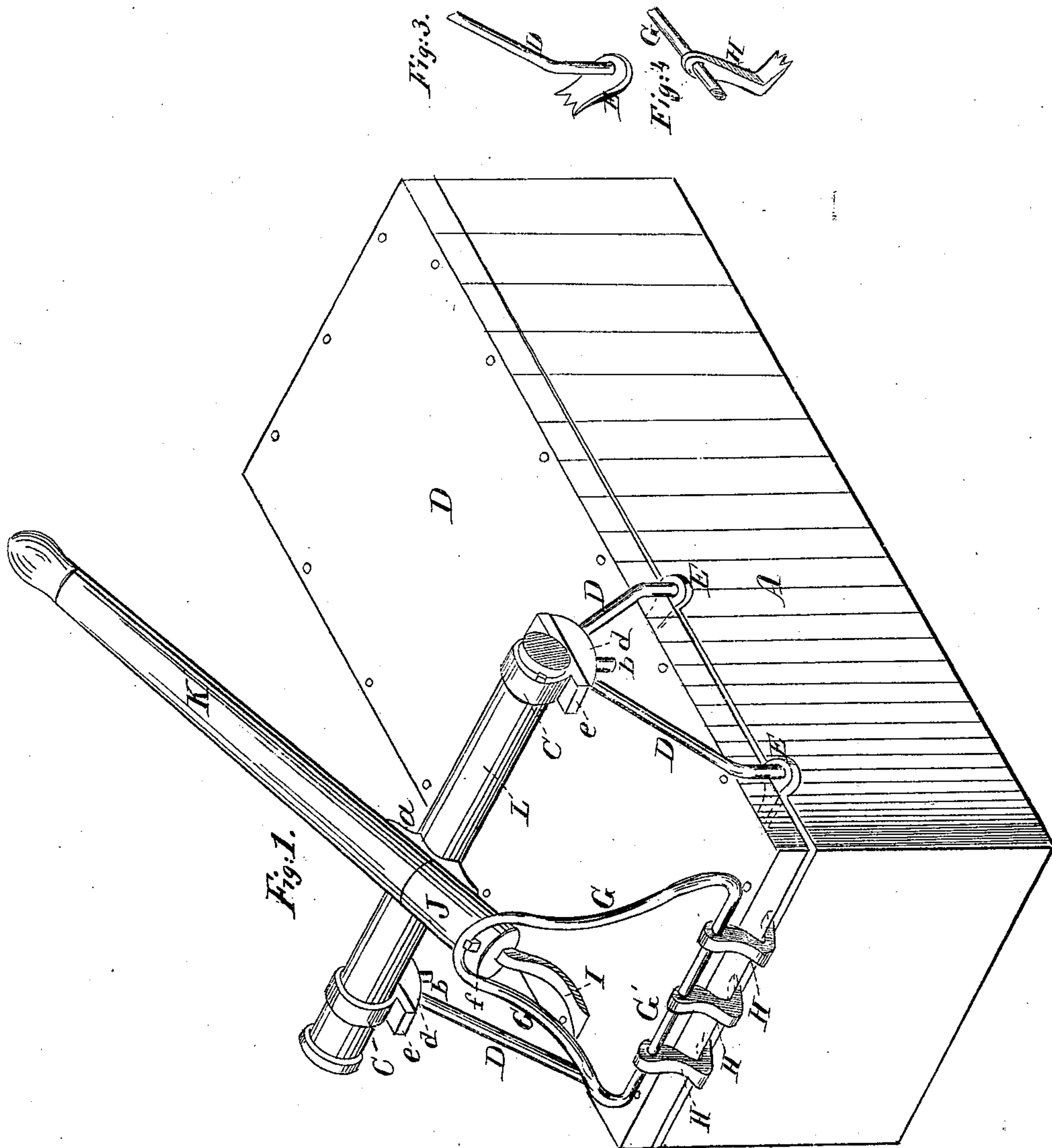


C. M. O'Hara,
Box Opener.

No. 93,335.

Patented Aug. 3, 1869.



Witnesses
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United States Patent Office.

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Letters Patent No. 93,335, dated August 3, 1869; antedated July 30, 1869.

IMPROVEMENT IN APPARATUS FOR OPENING BOXES.

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, C. M. O'HARA, of the city, county, and State of New York, have invented a new and improved Apparatus for Opening Packing-Cases; 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.

Figure 1 is a perspective view of my invention.

Figure 2 is a detail view of a modification of one of the devices.

Figure 3 is a detail view of one of the feet of the fulcrum-horse.

Figure 4 is a detail view of one of the lifting-hooks.

Similar letters of reference indicate corresponding parts.

The object of this invention is to provide a simple and effective apparatus for opening packing-cases, whereby the cover of the case may be readily separated from the body of the same, without splitting the cover or marring the edges of the case.

It consists, in general terms, of a fulcrum-horse having standards adjustable to cases of different widths, the standards being provided with feet, to insert between the cover and the edges of the case, so as to bring the fulcrum-beam across and above the cover.

It further consists of a hand-lever, provided with devices for maintaining its position on the cross-beam of the fulcrum-horse, and also with several hook-devices, which are connected with one end of the lever by any suitable connection, and which catch under the adjacent end of the cover. When thus arranged, the long arm of the hand-lever being pressed down, the cover of the case is raised, and separated from the body of the same, in any easy and simple manner, and without injury to either.

My invention will be better understood by reference to the drawings, where my invention is shown in the position occupied in practical operation.

A is a box or case, and B the cover or lid of the same.

The method heretofore employed, to open such cases, was to pry the cover off by means of chisels and other analogous implements.

This method, however, occasioned the splitting of the cover and the defacement of the box, and was, besides, a tedious and slow operation.

My apparatus for this purpose consists in the combination of the hand-lever K, having several hooks H arranged on a horizontal bar, G', forming part of any suitable device for connecting the said hooks with the short arm of the hand-lever.

The device, in this instance, is the triangular link G G' G, which bears the several hooks H upon its lower and horizontal part G', so as to render the hooks susceptible of arrangement along the end of the cover B, and insertion under the same, as shown.

The standards or legs of the fulcrum-horse are preferably composed of two pairs of metal legs, D, each pair of legs diverging from a cap or plate, d, and their lower ends being provided with wedge-shaped feet E, which are inserted under the cover and at the sides thereof, as shown, thus affording a point of attachment and support to sustain the strain brought upon the cross-beam L, which affords a fulcrum for the hand-lever, as shown.

This lever is provided with a notched projection, a, or other equivalent device, for preventing the lever from slipping upon the beam L.

The beam is provided with movable bearings C, which are preferably metal bands having base-plates e, which rest upon the plates d of the standards.

Pins b project downward from the plates e, and pass loosely through holes in the plates d, and serve to keep the bearings C from slipping off from the standards, and, at the same time, permit the adjustment of the standards, to avoid encountering nails, by the feet E, as it is not material that one pair of the standards should be slightly in advance of the other pair.

A modification of this part of the apparatus is shown in fig. 2, which illustrates a means of resting the beam L in bearing-jaws M, corresponding to the bands C.

In this figure the pin b, and plates e and d, are also shown; but I will note that the pin and the separate plates may be dispensed with, and the jaws M, plates e and d, may form one and the same continuous part, and be affixed to the standards, and constitute the cap or part connecting the upper ends of the same, and when a less elaborate apparatus is desired, this would be a preferable mode of constructing the fulcrum-horse.

When constructed, however, as shown in fig. 1, the bands slide on the beam L, in order to adjust them to cases of different widths.

The front edges of the feet and hooks are notched or serrated, as shown in figs. 3 and 4, to conduce to their more easy insertion.

The triangular link may be substituted for any suitable device which will afford a horizontal part, G', in which the hooks can slide and be adjusted to cases of different widths.

An example of such a substituted device obtains in a T-shaped link or plate, the crossed part being below, to afford attachment for the hooks.

The hand-lever is provided with a stud, f, in which the upper angle of the link is caught, as shown.

J is a ferrule or cap, which serves to strengthen the

attachment of the stud *f*, and also of a chisel or cutting-blade, *I*, the shank of which latter is inserted in the end of the hand-lever, and provides a useful implement for cutting the bands of metal, wood, or raw-hide, with which packing-cases are usually bound.

In practice, the lever and cross-beam are of wood, and the remaining parts of iron.

When not in use, the apparatus can be packed in small compass.

When to be used, the feet of the standards are driven under the cover, as shown, and the beam *L* placed thereon, with the pins *b* in the plates *d*. The hooks *H* are next driven under the end of the cover, and the upper part of the link caught on the lever beyond the stud *f*, as shown, the lever being rested on the beam *L*. A moderate pressure upon the long arm of the lever brings up the end of the cover, when the latter can then be easily removed.

This invention is adapted, also, for custom-house use, where one end only of the cover of the cases is raised, to permit the inspection of the contents, and then nailed on again.

Having thus described my invention,

I claim as new, and desire to secure by Letters Patent—

The implement for opening boxes, consisting of the lever *K*, the link *G*, carrying the hooks *H H*, the fulcrum-beam *L*, bands *C C*, and adjustable arms *D D*, provided with the feet *E E*, all the parts being constructed, arranged, and operating as herein described.

The above specification signed by me, this 11th day of November, 1868.

C. M. O'HARA.

Witnesses:

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