

# Charles H. Drury's - Spring Frames.

No. 119,697.

Patented Oct. 10, 1871.

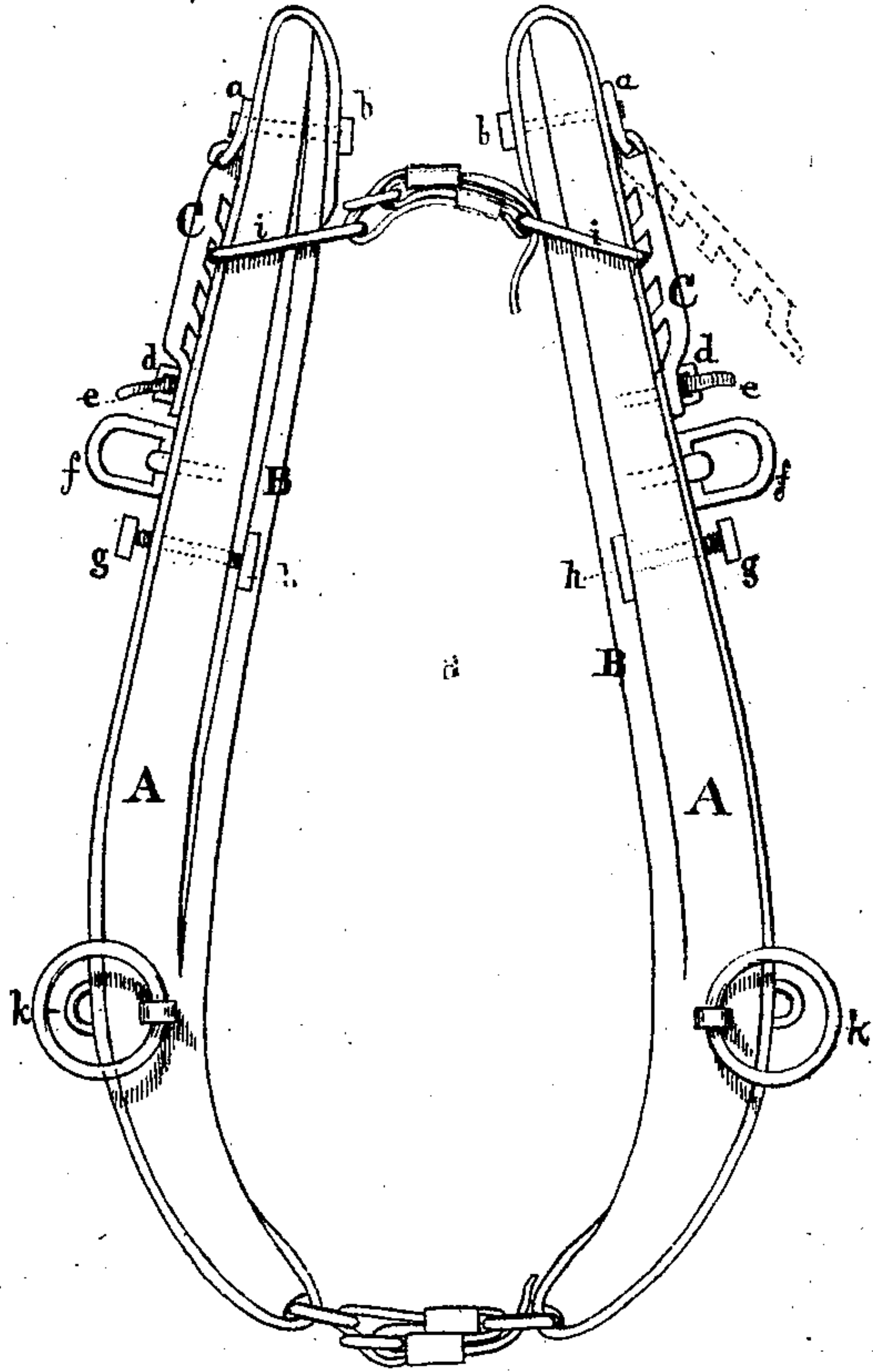


Fig. 1.

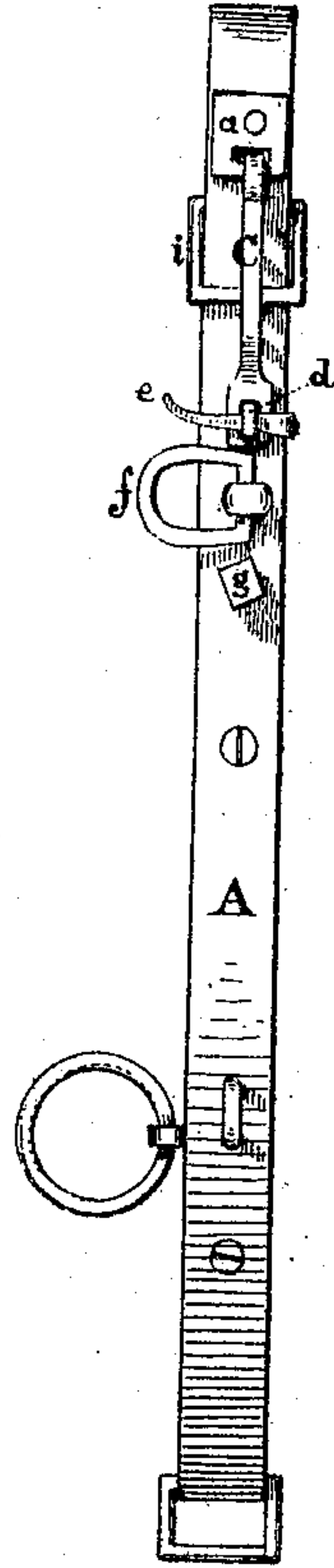


Fig. 2.

Witnesses

Geo E Secor

Charles H. Drury

Inventor

# UNITED STATES PATENT OFFICE.

CHARLES H. DRURY, OF OSCEOLA, ILLINOIS, ASSIGNOR OF ONE-HALF HIS RIGHT  
TO ISAAC M. SPENCER, OF SAME PLACE.

## IMPROVEMENT IN HAMES FOR HARNESS.

Specification forming part of Letters Patent No. 119,697, dated October 10, 1871.

*To all whom it may concern:*

Be it known that I, CHARLES H. DRURY, of Osceola, in the county of Stark and in the State of Illinois, have invented a Spring-Hame for Horses, &c.; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the annexed drawing making a part of this specification, in which like letters of reference refer to like parts, and in which—

Figure 1 represents a rear elevation of the hames; Fig. 2, a side elevation.

This invention consists in constructing ordinary high or low-topped hames for horses, &c., with a long spring on the side next to the collar, extending from the lower part of each hame to the top, and operated by a screw to cause the springs to conform to the collar and the neck of the animal; also in constructing the upper part of high-topped hames with a notched plate or rack, hinged to the outer side or edge of each hame, and fastened with an eye, staple, and thong of leather, for the adjustment of the square iron loops or rings of the hame-strap in said notches at convenient heights.

A A represent the hames, made of wood, and bound with iron; B B, long springs, formed by sawing a portion of the inner side of the hame from the top of the same down as far as the draft-rings *k k*, as shown in the drawing; but can be also constructed by attaching, instead of said long springs B B, a strip of iron, extending over the same space. At the top of the hame a slot is cut in the spring to admit of slight play on the neck of a bolt or screw, *b*, which confines this end of the spring between the iron binding and the hame. The spring is bowed or sprung by means of the screw *g*, or an equivalent, having its head on the outside edge of the hame, and pressing against the plate *h* on the inside of the spring. C C are notched plates or racks hinged to a staple, *a*, held by the bolts or screws *b b*, before mentioned. Each plate opens outward

from the hame, and each has several notches on the inner edge, next to the iron binding of the hame. The notches slant upward at an acute angle, and are to receive the ring *i* of the hame-strap. One end of the plate C is fastened or hinged by means of an eye on the staple *a*, and is secured at its other end by means of an eye fitting over another staple, *d*, set in the hame, and secured by a thong or tongue of leather or by similar devices. The dotted lines indicate the plate C when released from the staple *d*.

The operation of this hame is as follows: To accommodate these hames to the collar and animal's neck the screw *b* is loosened slightly; then the screw *g* is adjusted by turning or screwing it toward the spring B, springing the latter inward as far as necessary; then the upper screws *b b* are tightened, as they were merely loosened in order to allow the ends of the springs to move during the operation described.

The hinged racks C C need little explanation, as it is evident that they confer considerable adaptability to a deep or to a small neck by the adjustment of the rings of the hame-strap to a higher or to a lower notch in said racks or plates. In place of the eye and staple fastening *e d*, the racks may be made to close and be retained by a snap or spring.

What I claim as my invention is—

The springs B B, formed by separating a strip from each hame on the inner edge, or by inserting an equivalent metal spring, operated by a screw, *g*, or equivalent, the upper end of each spring being slotted, and respectively secured by bolts or pins to the hames, substantially as and for the purposes described.

In testimony that I claim the foregoing spring-hame I have hereunto set my hand this 4th day of May, 1871.

CHARLES H. DRURY.

Witnesses:

GEO. E. SECOR,  
WM. L. MOSS, Jr.

(46)