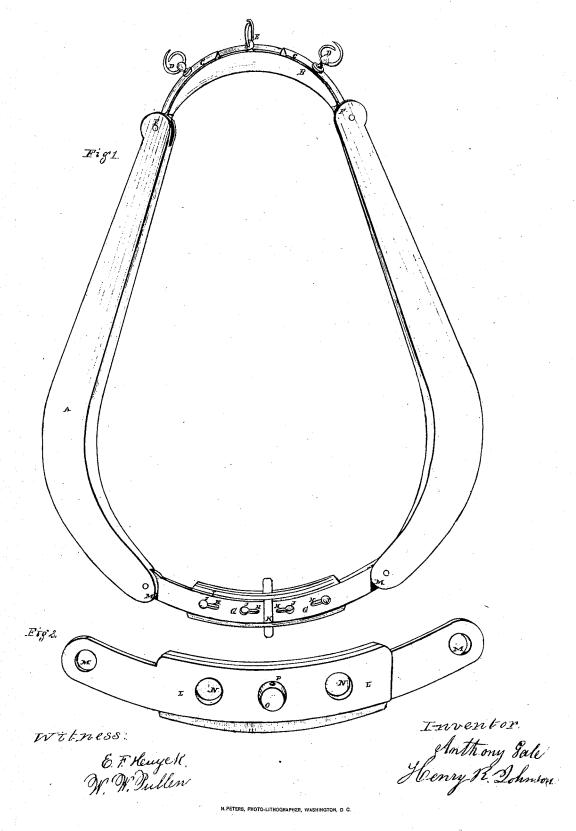
## Gale & Johnson,

Hame Fastener.

No. 110,226.

Patented Dec, 20, 1870.



## UNITED STATES PATENT OFFICE.

ANTHONY GALE AND HENRY R. JOHNSON, OF SHELBY COUNTY, KENTUCKY.

## IMPROVEMENT IN HAMES-FASTENERS.

Specification forming part of Letters Patent No. 110,226, dated December 20, 1870.

To all whom it may concern:

Be it known that we, ANTHONY GALE and HENRY R. JOHNSON, of the county of Shelby and State of Kentucky, have invented a certain new and useful Improvement in the Manner of Fastening the Hames of Horse-Harness, of which the following is a specification:

The first part of our invention relates to the fastening of the hames at the top of the collar, which consists in a small piece of iron made in a circular form so as to fit the collar neatly, and in the upper side of which is a deep groove, in which two small adjustable iron slides are fitted corresponding with the circle, one end of which is attached to the upper ends of the hames by a hook or hingejoint, while the other is secured in the groove by means of a set screw, the heads of which may be so formed as to be used as a ring for the lines, or as a convenient handle by which to change it when necessary to alter the size, which is done by changing the set-screw from one hole to the other in the grooved circle-

piece at the top.

The second part of our invention relates to the fastening at the lower end of the hames, which consists in two small pieces of flat iron, slightly circular toward the edges, one end of which may be attached to the hames either by a hook or hinge-joint, while the other ends have one or more slot-holes in them in order to adjust the size, one end of the holes being made large, so as to pass over the head of a small pin permanently fixed in a small iron plate immediately behind the connecting-links, in which they are made to fit neatly, so as to slide back and forth between the flanges, as required. In order to attach and detach the fastenings, and in order to prevent them from becoming detached by any reverse draft, there is a small key inserted through the flanges of the plate behind the ends of the connectinglinks, which holds them securely in their places.

The third part of our invention consists in using the last-named connecting-links only; and instead of the small iron flange-plate behind the links there is a small pin inserted permanently in one of the links, while the other has two or more holes through it large enough to pass over the pin by which they are held together and prevented from becom-

ing detached by a small pin through the end. This last part of our invention is intended to be used where a common, cheap article is required, or on old hames that have had the old style of fastenings.

Having thus described our invention, for a more minute description see drawing, in

which-

Figure 1 is a view of the hames, showing the fastening at the top and bottom. Fig. 2 is a view of the fastening at the lower ends, but differently arranged for common purposes.

A is the hames, without the necessary irons, which may be made of either wood or iron. B is the arch or circle piece at the top. O C are the circular sliding links by which the hames are connected with the arch-piece B. D D are the set-screws by which they are held in their places. E is the ring for the bridle-rein. F F are the hinge joints of the connecting links. G G are the connecting-links at the lower ends. M M are the hinge-joints of the same. H H are the slotholes. I is the flange-plate, and J J are the pins by which the links G G are held in their places. K is a small key, to prevent the links from being detached. L'L are the connectinglinks in Fig. 2. N N are the holes. O is the pin. P is the guard-pin.

Having thus fully described the drawing, what we claim as our invention, and desire

to secure by Letters Patent, is-

1. The sliding link-connections C C, the hinge-joints FF, and the set-screws DD, in combination with the arch or circle piece B, provided with the ring E, all constructed, arranged, and operating substantially as herein described.

2. The combination of the links GG, having slots H, and connected to the hames A by hinge joints M, the key K, and plate I with pins J, all constructed and arranged to operate substantially as described.

3. The links L L, provided with holes N, and secured together by the pin O and guardpin P, all constructed and arranged substantially as described.

ANTHONY GALE. HENRY R. JOHNSON.

Witnesses:

E. F. HUYCK, W. W. PULLEN.