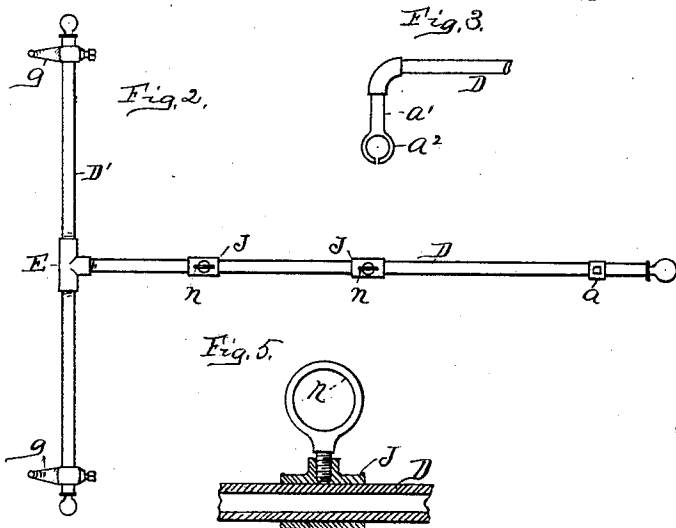
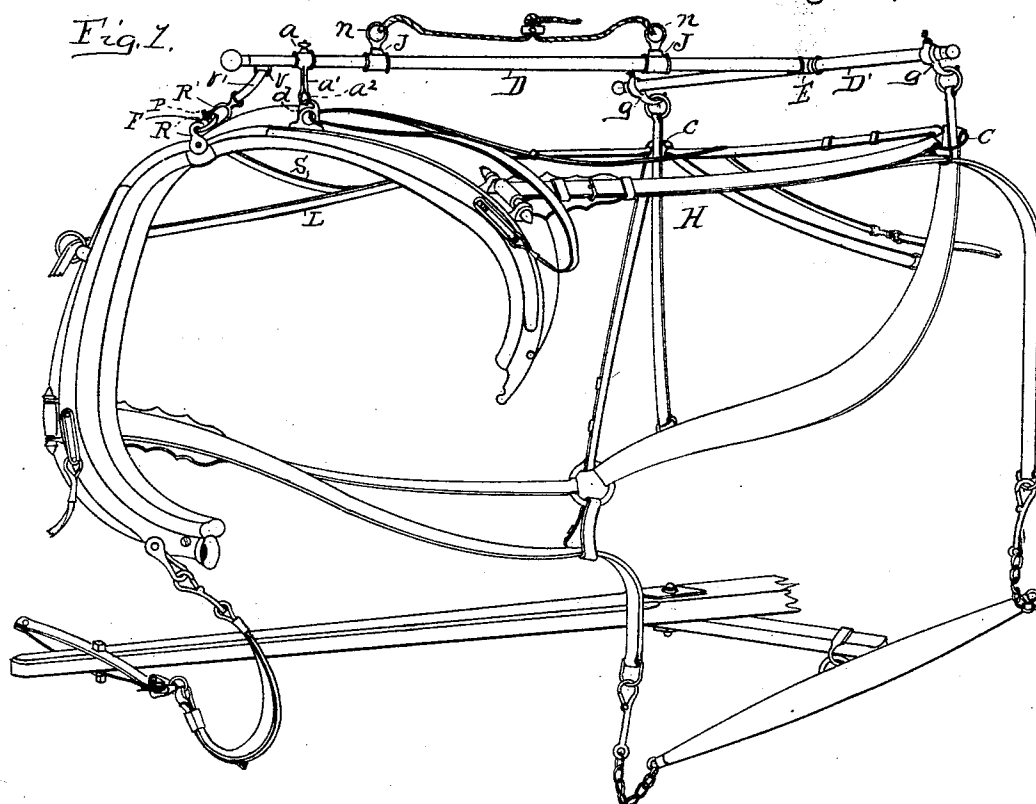


(No Model.)

R. G. ARMSTRONG.
HANGER FOR SWINGING HARNESS.

No. 481,627.

Patented Aug. 30, 1892.



Witnesses,
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UNITED STATES PATENT OFFICE.

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HANGER FOR SWINGING HARNESS.

SPECIFICATION forming part of Letters Patent No. 481,627, dated August 30, 1892.

Application filed April 16, 1890. Serial No. 348,163. (No model.)

To all whom it may concern:

Be it known that I, ROBERT G. ARMSTRONG, a citizen of the United States of America, residing at Wichita, in the county of Sedgwick and State of Kansas, have invented certain new and useful Improvements in Hangers for Swinging Harness, of which the following is a specification, reference being had therein to the accompanying drawings, and the letters of reference thereon, forming a part of this specification, in which—

Figure 1 is a perspective view of the hanger as it would appear supporting a swinging harness. Fig. 2 is a top plan view of the same, represented as provided with adjustable hooks; Fig. 3, a side view of the forward portion of the hanger, represented as provided with a stationary depending hook; Fig. 4, a detailed perspective of the center hame connection of the hanger, and Fig. 5 a detailed longitudinal section of a portion of the main bar of the hanger and of one of the adjustable hanger-loops thereof.

This invention relates to certain improvements in hangers for supporting swinging harness—such as used by fire companies for rapid hitching—which is suspended from the ceiling, where the harness is to be supported, by means of a rope, which improvements are fully set forth and explained in the following specification and claims.

Referring to the drawings, D represents the main bar of the hanger, having secured on its rear end the T-joint E, and D' D' represent similar but shorter bars fixed in said T-joint and arranged extending a like distance in either direction from bar D. The combination of bars thus connected are in form as the letter T, as shown.

J J are sleeves adjustably arranged on bar D and are respectively provided with the screw-rings *n n*, the screws of which turn into screw-threaded holes of said sleeves, and when turned in against the bar hold the sleeves from sliding out of position.

g g are hooks provided with eyes, and are respectively sleeved on the extending bars D' D', and are adapted to be adjusted along on the bars and held at any desired place or in any desired position by means of set-screws, as shown.

a is a sleeve arranged on the forward end

of bar D and is adapted to be adjusted along on the bar and held by means of a set-screw, as shown, and is provided with the depending hooked arm *a'*, the hook *a²* of which is in the form of a split ring, and with the depending loop *v*, which has connected therewith the clevis R' through the medium of the strap *v'*.

In use the hanger is suspended by means of a rope having two branches, as shown, which branches respectively connect with the rings or loops *n n*, which are adjusted to balance the supported harness.

The harness H is provided at its rear part with a pair of attached rings *c c*, which are respectively placed on the hooks *g g*.

The harness-hame is provided at its top center with a ring F, attached thereto through the medium of the clevis R or by other means, which ring is connected with the hanger-clevis R' by means of the placing of the pin P of said clevis, which pin is connected to the harness-line L through the medium of the short strap S, as shown in Figs. 1 and 4, and one side line-loop of the hame is provided with a hook *d*, which hook is connected throughout its length to said line-loop by means of a thin central web, and when that side of the hame and attached collar of the harness is raised to the position shown in Fig. 1 the said hook *d* is placed in the double hook *a²* of depending arm *a'* of the hanger, the web of hook *d* entering the split of hook *a²*, and thus the harness is supported with its rear part and the hame and collar spread ready and in position for a horse to step under it. After a horse has taken his position under the harness the action of the attendant in hitching him is first to grasp and pull down the elevated side of the hame and collar and force together, and thereby lock, the hame and collar on the horse, which action will cause hook *d* to turn and become detached from the hook *a²*. At the same time the driver has mounted his seat, grasped the lines L, and pulled them up taut to be in readiness to drive, which action will pull pin P from clevis R' and thereby entirely detach the forward end of the hanger from the harness, when the weight of the rear part of the harness will overbalance the hanger and cause it to tilt, and thereby release the rear part of the harness from its rear hooks *g g*, when a weight secured to the

opposite end of the suspending rope—such as is ordinarily used and not necessary to be shown—will elevate the hanger high enough to be out of the way to permit the driver to pass and not be engaged by it.

The purpose of the double hame connection at the forward end of the hanger is to connect the hame in two places in order that one side of the hame and collar may be held up spread from the opposite fellow part, as shown in Fig. 1. However, when used with harnesses where the hame and collar is made to balance when in proper supported position the clevis attachment R' V' may be dispensed with, and when used with harness not provided with such hook d the depending arm and its hook a^2 may be substituted by the clevis attachment, attaching the clevis by means of its pin P to the elevated side hame line loop or ring.

The various adjustments shown in the drawings is for the purpose of adapting the hanger to accommodate harnesses of various sizes.

It is intended that the bars D and D' be of gas-pipe, united by being screw-threaded and turned into their screw-threaded T-joint E; but I desire not to confine this invention to any special kind of material.

The drawings represent but one hanger in Fig. 1, but in all ordinary service a pair is used, each one in like manner as described,

for supporting a like harness to that shown, oppositely arranged from the one represented, for the purpose of supporting what is commonly termed a "double set of harness" for a team of horses.

Having thus described my invention, what I claim as new and useful, and desire to secure by Letters Patent, is as follows:

1. The hanger for swinging harness, consisting of a longitudinal bar provided with adjustable rings or hooks for suspending it and with an adjustable depending hook for supporting the forward portion of the harness, two opposite laterally-extending arms or bars connecting with the longitudinal bar, and the two adjustable extending hooks arranged upon said lateral arms or bars, adapted to support the rear portion of the harness when the longitudinal bar is in a horizontal position and release the harness when said bar is tilted, substantially as specified.

2. The hanger for swinging harness, consisting of the combination of the bars D and D' D', the T-coupling E, the adjustable suspending-rings $n n$, the adjustable hooks $g g$, and the adjustable hook a^2 , and clevis attachment V, V', R', and P, substantially as and for the purpose set forth.

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Witnesses:

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