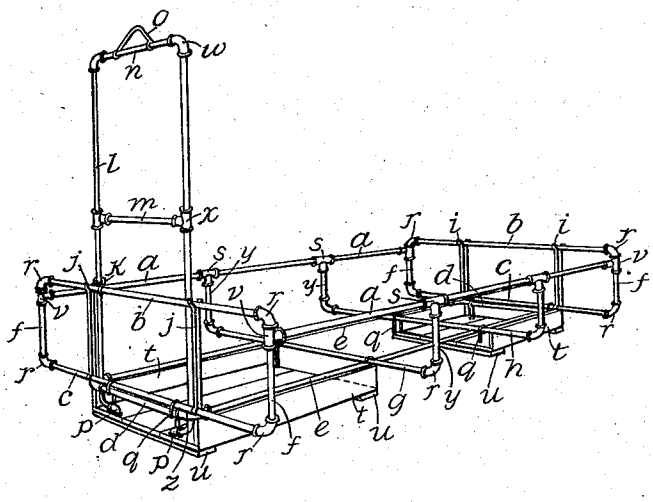
No. 840,663. PATENTED JAN. 8, 1907.

J. H. SCHUNEMAN.

HAY RACK.

APPLICATION FILED AUG. 30, 1906.



WITNESSES:

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JOHN H. SCHUNEMAN, OF CEDAR FALLS, IOWA.

HAY-RACK.

No. 840,663. Specification of Letters Patent. Patented Jan. 8, 1907.

Application filed August 30, 1906. Serial No. 332,669.

To all whom it may concern:

Be it known that I, JOHN H. SCHUNEMAN, a citizen of the United States of America, and a resident of Cedar Falls, Blackhawk county, Iowa, have invented certain new and useful Improvements in Hay-Racks, of which the following is a specification.

My invention relates to hay-racks; and the object of my improvements is to furnish a rack constructed of tubular metal so arranged as to be easily knocked down and so braced as to secure the maximum of strength with the minimum of weight. This object I have attained by the means which are hereinafter described and claimed and which are illustrated in the accompanying drawing, which is a perspective view of my invention.

The view here given shows the rack as dissociated from its carrying-truck, as it may be readily placed thereon or removed therefrom as desired.

The rack consists, essentially, of two principal parts, first, a bed-frame, and, second, superposed thereon, upright end frames having parallel horizontal rack-tubes, the latter having connected transverse braces.

The bed-frame consists of end tubes *c* and *d*, connected, by means of the unions *z*, with the side tubes *e*. Superposed upon the end tubes *c* and *d* are upright rectangular tubular frames composed of upright tubes *f* and horizontal tubes *b* and *c*, connected together by means of the unions *r*. The uprights *f* are connected, by means of T-couplings *v*, to the ends of horizontal tubes *a*, the latter extending parallel to each other in the same plane along each side of the rack, as shown. The side tubes *a* are provided with supporting-braces consisting of the transverse tubes *g* and *h*, which lie upon and are supported by the lower side rods *e*, the ends of said transverse tubes being connected to the short uprights *y* by means of unions *r* and the uprights *y* being connected to the upper side rods *a* by means of T-couplings *s*. The rear end tubes *b* and *c* are supported at intermediate points within bifurcations on each end of the uprights *i*. The front end tubes *b* and *c* are likewise supported at intermediate points by the bifurcations on each end of like uprights *j*.

Between the front lower tube *c* and the intermediate tube *g* and between the rear lower tube *c* and the intermediate tube *h* are placed open wooden frames composed of transverse bars *u*, supporting longitudinal side bars *t*. The transverse tubes *c*, *g*, and *h*, are connected to these open wooden frames by means of staples *q*. The bearings *p*, attached to the front end of the forward wooden frame contain the inwardly-bent rotatably-mounted lower ends of the ladder-uprights *l*. These ladder-uprights *l* are connected intermediately to a cross-tube *m* by means of T-couplings *x* and at the top to a cross-tube *n* by means of unions *w*. O is a loop rotatably mounted on the cross-tube *n*. When lifted into its upright position, as shown, this front ladder is held in place against the tube *b* by means of a catch *k*, the latter being slidable up and down the upright *l*. If desired, the open spaces between the front and rear tubes *b* and *c*, the side tubes *a* and *e* may be filled in by wooden planks or in any other desired manner, without, however, in any manner altering the particular functions of my invention, which consist in the peculiar method of locating and bracing the different parts of the rack.

The rack being light in weight in proportion to its size as compared with racks made wholly of heavy timbers may be easily lifted on or off the bed of a wagon-truck, the bottom frames *t u t u* fitting down upon said bed. The open spaces on each side between the projecting parts of the transverse tubes *c* and *g* and *c* and *h* permit the wheels of the running-gear to clear the rack. The particular style of bracing the end frames and the upper side rods affords a maximum of strength with a minimum of weight, and the manner of linking the rack to the bed-plate by means of staples, as well as the mode of connecting together the various parts of both by means of tubular couplings renders the whole device easy to be put together or knocked down.

Having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A hay-rack comprising a base-frame, end frames mounted upon the base-frame and each comprising top and bottom and side tubes coupled together, intermediate transverse braces connecting said side tubes, the bottom tubes of the end frame and the transverse braces being detachably connected to the base-frame, and to separated

open boxings, and separated open boxings beneath said bottom tubes and transverse braces.

2. A hay-rack comprising a base-frame, end frames mounted upon the base-frame and each comprising top and bottom and side tubes coupled together, intermediate transverse braces connecting said side tubes, the bottom tubes of the end frames and the transverse braces being detachably connected to the base-frame, and a front ladder pivotally connected to said rack having means for detachably securing it thereto in an upright position.

3. A hay-rack comprising a base-frame, end frames mounted upon the base-frame and each comprising top and bottom and side tubes coupled together, intermediate transverse braces connecting said side tubes, the bottom tubes of the end frame and the transverse braces being detachably connected to the base-frame and to separated open boxings, open boxings beneath said bottom tubes and transverse braces, and a front ladder pivotally connected to said rack having means for detachably securing it thereto in an upright position.

Signed at Waterloo, Iowa, this 11th day of August, 1906.

JOHN H. SCHUNEMAN.

Witnesses:
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