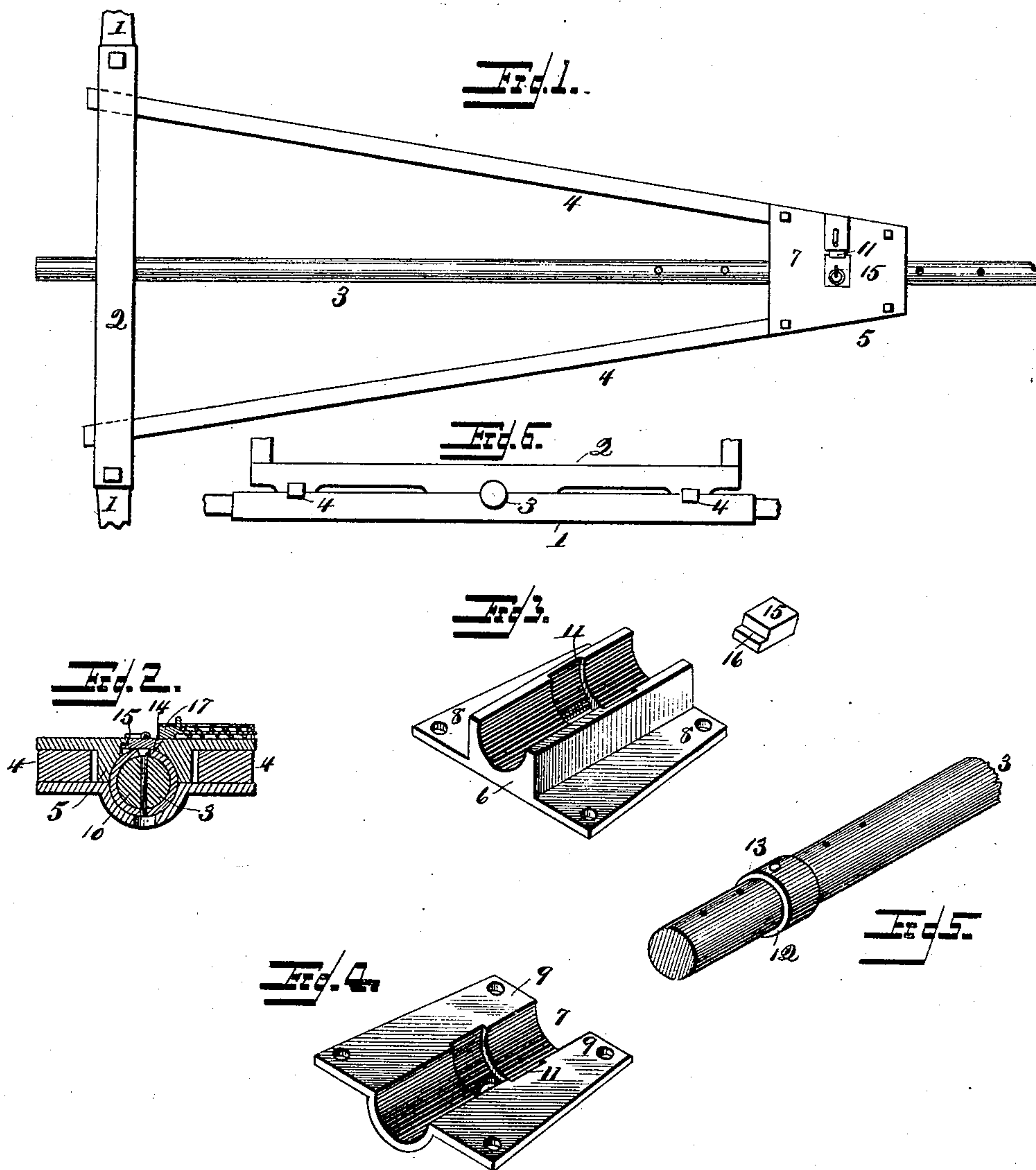


(No Model.)

A. G. TURNER.  
WAGON FRAME.

No. 480,980.

Patented Aug. 16, 1892.



WITNESSES:

*J. M. Fowler Jr.*  
*L. M. Marble.*

INVENTOR

*Monzo G. Turner*

BY

*E. M. Marble*

ATTORNEY.

# UNITED STATES PATENT OFFICE.

ALONZO G. TURNER, OF DURANGO, COLORADO, ASSIGNOR OF TWO-THIRDS  
TO FRANK A. KIMBALL, OF SAME PLACE, AND ALEXANDER LEVY, OF  
WALSENBURG, COLORADO.

## WAGON-FRAME.

SPECIFICATION forming part of Letters Patent No. 480,980, dated August 16, 1892.

Application filed March 8, 1892. Serial No. 424,215. (No model.)

*To all whom it may concern:*

Be it known that I, ALONZO G. TURNER, a citizen of the United States, residing at Durango, in the county of La Plata and State of Colorado, have invented certain new and useful Improvements in Wagon-Frames; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to wagon-frames, and more particularly to that part of said frames known as the "reach;" and it consists in the novel construction and arrangement of the parts, as is more fully hereinafter described.

The object of my invention is to so attach the hounds to the reach that in case the rear axle should become inclined to the main body of the wagon—as, for instance, should one of the rear wheels enter a deep hole in the road—the hounds and reach will not be twisted and strained, as is the case with the constructions now commonly in use. This object is attained in the construction herein described, and illustrated in the drawings which accompany and form a part of this specification, in which the same reference-numerals indicate the same or corresponding parts, and in which—

Figure 1 is a plan view of the rear portion of the wagon-frame, showing the rear axle, bolster, the hounds, the reach, and the manner of attaching the hounds to the reach. Fig. 2 is a vertical section of the box which serves to connect the hounds and reach. Fig. 3 is a perspective view of one part of said box inverted, and to one side of the figure is shown the cover which closes an opening in the top of the box. Fig. 4 is a perspective view of the other portion of said box. Fig. 5 is a perspective view of the reach, and Fig. 6 is a rear elevation of the axle and bolster.

In the drawings, 1 is the rear axle of the wagon, 2 the bolster, and 3 the reach, which passes through a hole partly in the bolster and partly in the axle, as is the usual construction.

4 4 are the hounds, which are attached to the axle and bolster in the usual manner. At their front ends they pass between and are

bolted to flanges of the box 5, which is preferably of cast metal. This box 5 is, as shown, composed of two parts 6 and 7, which have at their sides projecting flanges 8 and 9, separated by a space sufficient to receive the hounds 4 4, which are held in place by bolts passing through bolt-holes in the flanges 8 and 9 and in the hounds.

The two parts 6 and 7 of the box 5 each have a longitudinal semi-cylindrical recess, which register when the two parts are placed together, forming a cylindrical opening 10, through which the reach 3 passes. This opening has near its mid-length a groove 11, and into this groove fits a band 12, which encircles the reach. A pin 13, passing through holes in the band and in the reach 3, secures the band to the reach. There are a number of holes in the reach, through any one of which the pin 13 may be passed, thus permitting of the longitudinal adjustment of the band on the reach, by which means the distance between the front and rear axles is varied.

The band 12, bearing against the side of the groove 11, forms the means for transmitting the pull from the front axle of the wagon to the rear axle.

In order to obtain access to the pin 13 for the purpose of adjustment, an opening 14 is provided in the top of the part 6 directly above the pin. This opening is closed by the cover 15, one end of which is beveled, and the other end is provided with a flange 16, projecting into a recess in 6, forming a knuckle-joint, which permits the cover 15 to be raised as if it were hinged to the part 6, exposing the top of the pin 13. A ring-bolt secured to this cover 15 is provided to facilitate the raising of the cover.

The cover 15 rests against the top of the band 12, which therefore prevents it from dropping down. A pin 17, sliding in a guide forming part of 6 and pressed forward by a spring, rests over the end of the cover 15 and prevents it from rising. When it is desired to raise the cover, this pin is pushed back until it clears the cover, which may then be raised.

A hole is provided in the part 7 of the box



5, directly under the pin 13, for driving out the pin in case it should for any reason become not readily removable.

It is not necessary that the reach be round, as shown in the drawings. All that is required is that the part which passes between the axle and bolster shall be round.

It is apparent that should the axle 1 become inclined to the body of the wagon, as when one of its wheels enters a deep hole, the axle, bolster, hounds, and box 5 will swing freely about the reach 3 and no part will be strained.

Having thus completely described the construction and operation of my invention, what I claim as new is—

1. In a wagon body or frame, the combination, with the hounds and reach, of a two-part box having a longitudinal and cylindrical opening therethrough, the upper part of said box having a rectangular slot therein for the reception of a removable cover held in place by a spring-pressed pin, the lower part of said box being provided with an opening for drawing out the securing-pin, substantially as described.

2. In a wagon body or frame, the combina-

tion, with the reach provided with an adjustable encircling band, of a two-part box with a cylindrical opening therethrough secured to the hounds and having in its upper part a rectangular slot adapted to secure a removable cover therein, held in place by a spring-pressed pin, and a bolt or pin passing through the band encircling the reach, whereby the wagon-body may be lengthened or shortened, substantially as described.

3. In a wagon body or frame, a box for connecting the reach and hounds, formed in two parts, having flanges for the reception of the hounds, and registering semicircular and longitudinal recesses forming a cylindrical aperture for the reception of the reach, said aperture having a transverse groove midway of its length, and a band secured to the reach and fitting into said groove for transmitting the pull from the reach to the hounds, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

ALONZO G. TURNER.

Witnesses:

HARRY Y. DAVIS,  
L. M. MARBLE.