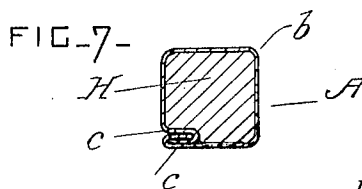
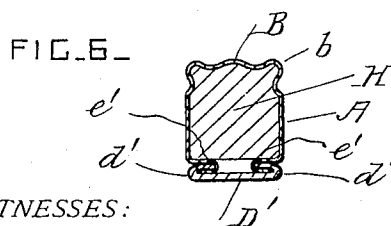
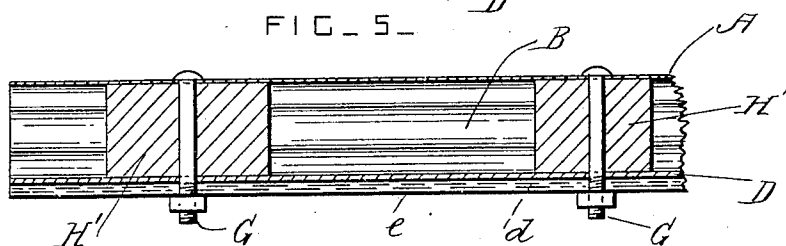
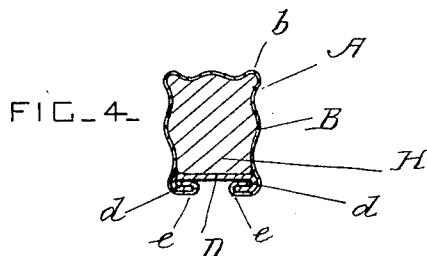
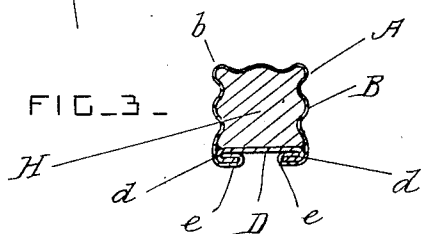
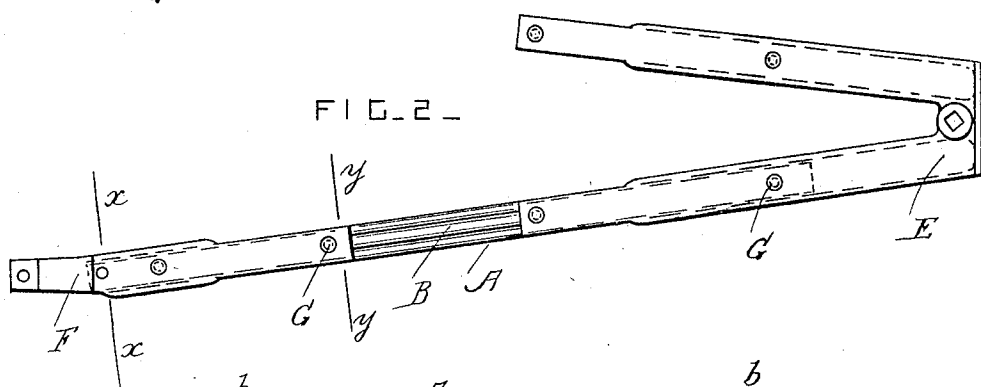
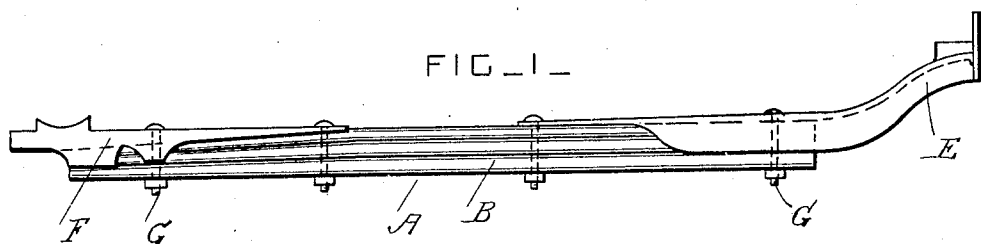


No. 876,013.

PATENTED JAN. 7, 1908.

W. H. RAKESTRAW.
REACH BAR.
APPLICATION FILED APR. 9, 1907.



WITNESSES:

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UNITED STATES PATENT OFFICE.

WILLIAM H. RAKESTRAW, OF BLOOMINGTON, ILLINOIS.

REACH-BAR.

No. 876,013.

Specification of Letters Patent.

Patented Jan. 7, 1908.

Application filed April 9, 1907. Serial No. 367,263.

To all whom it may concern:

Be it known that I, WILLIAM H. RAKESTRAW, a citizen of the United States, residing at Bloomington, in the county of McLean and State of Illinois, have invented certain new and useful Improvements in Reach-Bars; 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.

This invention relates to the reach-bars used in the running-gear of vehicles; and it consists in the novel construction and combination of the parts hereinafter fully described and claimed.

In the drawings, Figure 1 is a side view of the reach-bar and its end brackets. Fig. 2 is a plan view of the same. Figs. 3 and 4 are cross-sections through the reach-bar, taken on the lines $x-x$ and $y-y$ in Fig. 2 respectively. Fig. 5 is a longitudinal section through a portion of the reach-bar showing the core or packing in separate pieces. Figs. 6 and 7 are cross-sections through the reach-bar showing modifications.

A is the reach-bar which is formed of thin sheet metal. This bar is preferably provided with longitudinal corrugations or crimps B to strengthen and stiffen it, but it may be made without corrugations, if desired, on any or all of its surfaces, and any desired number of corrugations may be formed in any one of its surfaces. The sheet metal is bent to form a substantially rectangular or square bar, and the corrugations are preferably arranged so that the bar has rounded corners b .

The edges of the sheet metal may be interlocked by means of two hook-shaped folds c , as shown in Fig. 7, if desired, and these folds are arranged on the underside of the bar. By preference, however, the bottom side of the bar is formed of a separate plate of metal D of greater thickness than the main portion of the bar A. The plate D is provided with two hook-shaped folds d at its edges which interlock with two hook-shaped folds e on the edges of the thin plate which forms the main portion of the bar A. The interlocking folds are arranged at the sides of the bar so that a channel is formed between them along the center of the bottom of the bar. The bar is greatly strengthened by the presence of these interlocking folds

on each side of its bottom, and the folds allow the necessary elasticity.

In the modification shown in Fig. 6, the plate D' is provided with upwardly projecting hook-shaped folds d' , and the folds e' on the main portion of the bar A are bent downward and outward. The form of the folds, as shown in Fig. 3, in which the parts d are bent downward is preferred, as it makes a neater appearance from the side.

E is the fastening bracket, reach-iron, or perch-iron, which is secured to the front end portion of the reach-bar for connecting it with a fifth-wheel and front axle of any approved construction. The bracket E is shown suitable for a double reach-bar, but any approved form of end bracket can be used.

F is the fastening bracket, reach-iron, or perch-iron, which is secured to the rear end portion of the reach-bar for the purpose of connecting it with the rear axle of a vehicle.

G are bolts which pass vertically through the reach-bar and secure it to the fastening brackets E and F.

H is a core-filling, or packing, arranged inside the hollow bar A. This core preferably consists of a corrugated bar of wood which fits snugly within the bar A and extends for its full length. The core may however be formed in separate pieces H' as shown in Fig. 5, if desired, and these pieces have holes or passages for the bolts G, the object of the core being largely to re-inforce the corrugated metal where it is subjected to the strain of screwing up the nuts on the bolts G, and to prevent the corrugations from being distorted. The core may be made of any other packing material besides wood, if desired, and cement or other convenient composition may be used for that purpose.

The top and bottom portions of the reach-bar are usually parallel for the full length of the bar, but when one end portion of the bar is required to be tapered or beveled to fit the end bracket, as shown in Fig. 1, the taper of the bar is preferably formed by increasing the depth of its side corrugations gradually towards the end of the bar, so that the bar is not weakened. Figs. 3 and 4 show the difference in the depth of the corrugations at different points of the length of the end portion of the bar.

What I claim is:

1. The combination, with a tubular reach-

bar formed of a trough-shaped main portion, and a bottom plate, said parts having interlocking hook-shaped folds at their edges, and the said folds being arranged parallel with
5 and close adjacent to the under surface of the said bottom plate so that no lateral projections are formed on the said reach-bar, of fastening brackets secured to the end portions of the said bar.

10 2. The combination, with a tubular reach-bar formed of a trough-shaped plate of sheet metal provided with longitudinal corrugations, and a plate forming one side portion of the said bar, said plates having their side
15 edges overlapped and secured together, of fastening brackets secured to the end portions of the said bar.

3. The combination, with a tubular reach-

bar formed of a trough-shaped plate of sheet metal and a plate of sheet metal which forms 20 the bottom of the said bar, the sides of the said trough-shaped plate being shallower at one end of the bar and being provided with longitudinal corrugations which increase in depth as the depth of the said sides dimin- 25 ishes, said plates having their meeting edges overlapped and secured together, of fastening brackets secured to the end portions of the said bar.

In testimony whereof I have affixed my 30 signature in the presence of two witnesses.

WILLIAM H. RAKESTRAW.

Witnesses:

E. E. DONNELLY,
L. O. WINTER.