July 11, 1939. E. J. WENDELL 2,166,031

HOSE BRIDGE DEVICE

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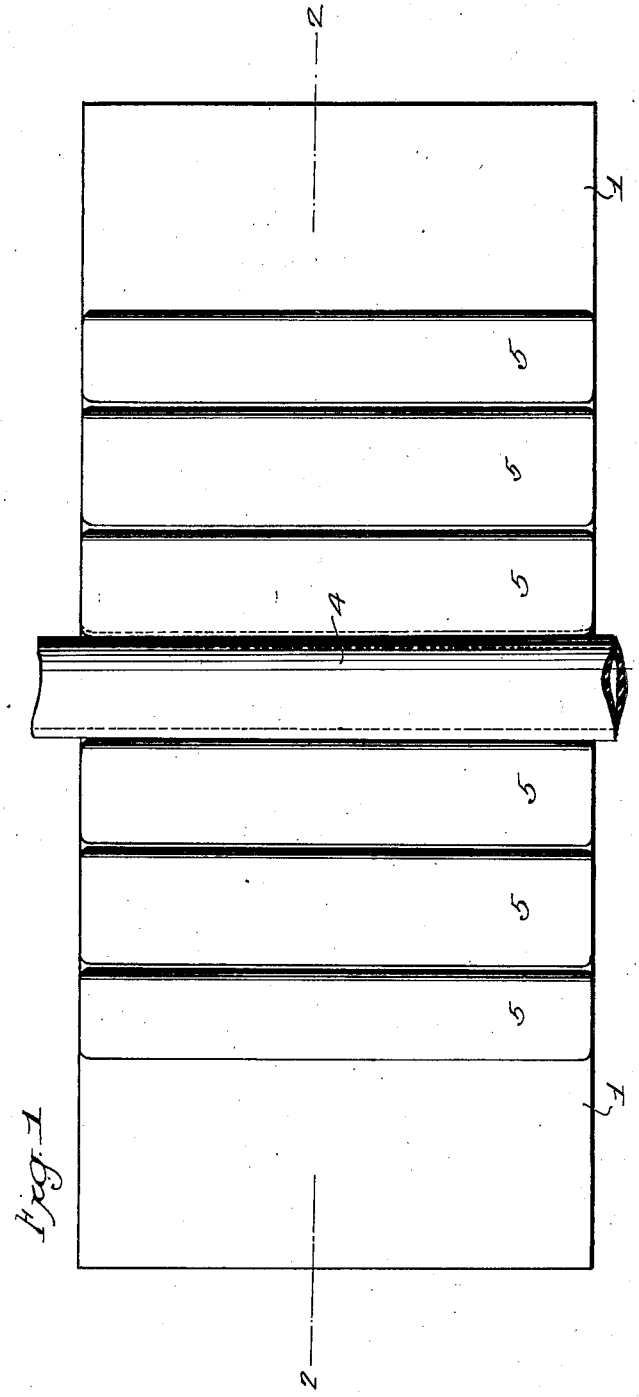


Fig. 1

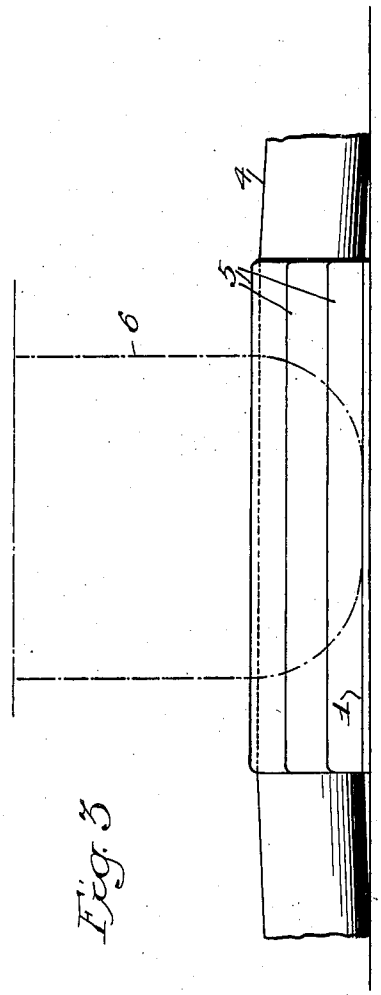


Fig. 3

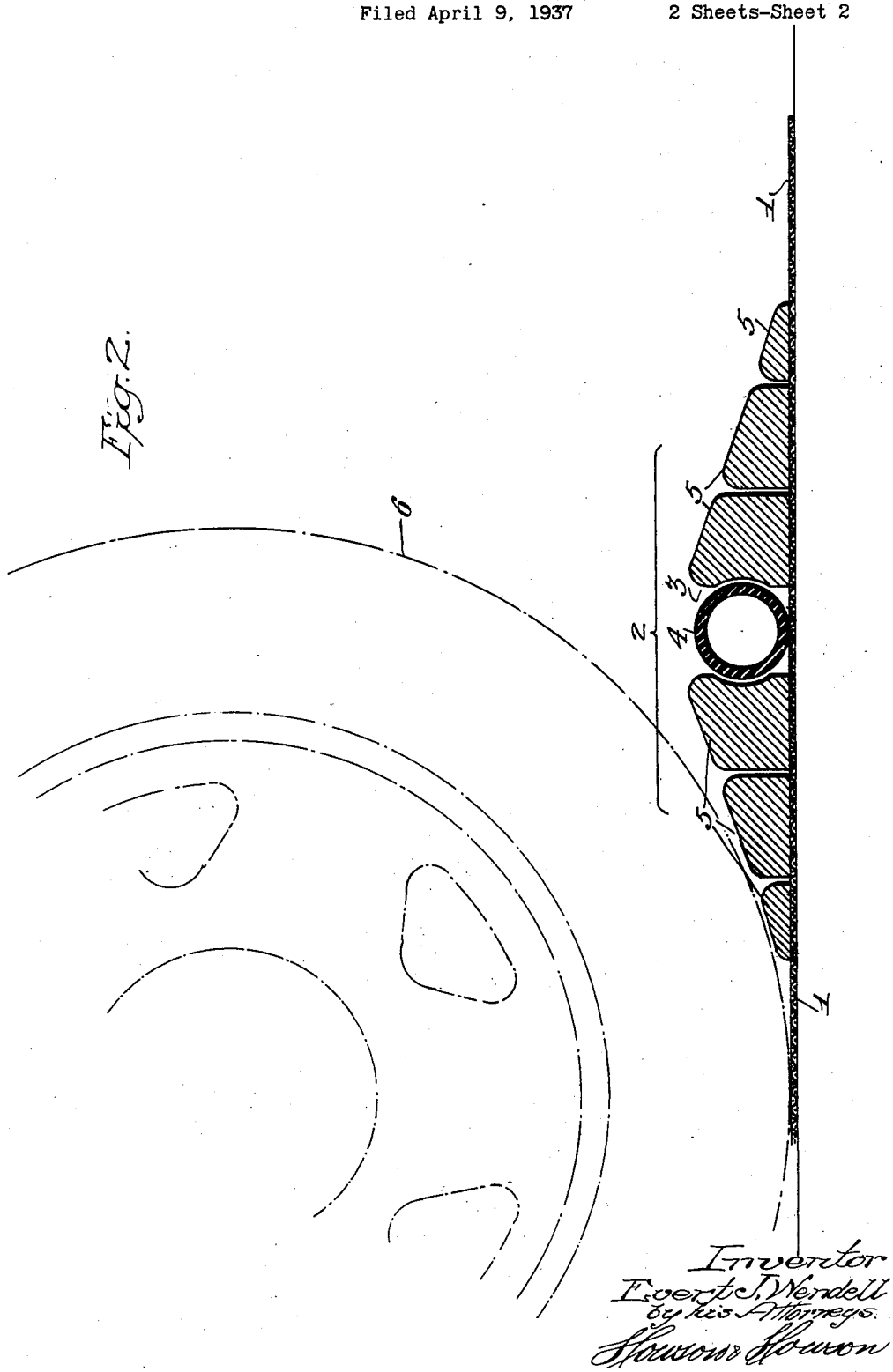
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Fig. 2.



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2,166,031

HOSE BRIDGE DEVICE

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Application April 9, 1937, Serial No. 136,021

4 Claims. (Cl. 104—275)

This invention relates to improvements in bridge devices of a character designed to permit vehicles to pass freely over fire or other hose lines without injury to the latter.

A principal object of the invention is to provide a device of this character that shall be substantially free from the tendency of the prior devices of the same class to creep or move under the thrusts imposed thereon by the vehicle wheels; and which by reason of the novel anchoring means hereinafter described is not subject to displacement from the hose or from its original position upon the road or other underlying surface.

Another object of the invention is to provide a device of the stated character that shall be characterized by relative simplicity of form and cheapness of manufacture, and that shall be capable of being folded for storage into a relatively compact bundle.

In the attached drawings:

Figure 1 is a plan view of a hose bridge made in accordance with my invention;

Fig. 2 is a sectional view on the line 2—2, Fig. 1, and

Fig. 3 is an end elevational view of the device.

With reference to the drawings, my device comprises in a preferred embodiment a flat, flexible base element 1, which in the present instance may consist of a suitably wide and long strip or sheet of webbing or rubberized textile fabric. Centrally located upon the base element 1 is an elevated bridge section 2 having a cavity 3, in the form, in the present instance, of a transverse channel, for reception of the hose 4, the latter resting upon the said base element. In the present instance, the bridge section 2 is composed of a plurality of blocks 5 which are suitably secured to the base element 1, and which at each side of the cavity 3 are shaped and graded as to size to form an inclined way for passage of the vehicle wheel over the hose. The blocks 5 may suitably be made of wood, although the material of which the blocks, or the base element 1, are made is not an essential of the invention. It is apparent, however, that by a judicious selection of materials the weight of the device as a whole may be reduced to a minimum consistent with the strength required.

With reference to Fig. 2, it will be noted that the base element 1 is extended to a substantial distance beyond the two outer and smaller of the blocks 5 of the bridge section, and that the lengths of these extensions is such that a vehicle wheel 6 in approaching the device will initially engage and ride onto the said extensions in advance of the engagement by the wheel of the elevated bridge section composed, as described, of the blocks 5. The effect of the initial engagement of the wheel in this manner with the extensions of the base element 1 is to clamp the device solidly to the underlying supporting surface, and this clamping action remains in effect at the moment the wheel first engages the said elevated bridge section. In the prior devices of this class, and in the absence of the extended flat base element, the wheel in striking the elevated bridge exerts a forward thrust tending to displace the device as a whole before the vehicle, and these prior devices, therefore, exhibit a tendency to creep on the supporting surface; and in extreme cases the thrust is sufficient to entirely displace the bridge device from the hose. As a result, the hose is either subjected to severe strain and abrasion or crushed and otherwise damaged by the vehicle wheel. By the construction described above, this tendency of the wheel to displace the device is eliminated through the initial clamping of the device to the underlying surface prior to engagement of the wheel with the elevated bridge.

By making the base element 1 of a flexible material, the latter may conform readily to the contour of the road or other underlying surface, and will lie flat upon the latter, and this ability of the device to conform to the underlying contours is increased by sectional construction of the elevated bridge portion. This construction also permits the folding of the device as a whole into a relatively compact bundle for storage. It will be apparent, however, that the benefits of my invention may be enjoyed, at least in some degree, by forming the base extensions or aprons which initially receive the vehicle wheel of rigid material, such as metal; and that the elevated bridge section may take a variety of forms other than that illustrated without departure from the invention.

I claim:

1. A hose bridge comprising two oppositely disposed ramps and a transverse hose-receiving cavity intervening between the adjoining elevated ends of said ramps, each of said ramps consisting of a plurality of wheel-supporting members, each of said members being substantially rectangular in plan and each being disposed with its longitudinal dimension extending transversely of the length of the bridge and from side to side thereof and said members being graduated as to

height, said ramps and the individual members of each of said ramps being articulated together.

2. A hose bridge comprising two oppositely disposed ramps and a transverse hose-receiving cavity intervening between the adjoining elevated ends of said ramps, said ramps being articulated one to the other, each of said ramps consisting of a plurality of wheel-supporting members, each of said members being substantially rectangular in plan and each being disposed with its longitudinal dimension extending transversely of the length of the bridge and from side to side thereof and said members being graduated as to height, the said members of each ramp being separated from each other by spaces and being articulated one to another.

3. A hose bridge comprising two oppositely disposed ramps and a transverse hose-receiving cavity intervening between the adjoining elevated ends of said ramps, a flexible base element underlying said ramps, each of said ramps consisting of a plurality of wheel-supporting members, each of said members being substantially rectangular in plan and each being disposed with its longitudinal dimension extending transversely of the length of the underlying base element and from side to side thereof and said members being graduated as to height, each of said members being secured to said flexible base element.

4. A hose bridge comprising two oppositely disposed ramps and a transverse hose-receiving cavity intervening between the adjoining elevated ends of said ramps, a flexible base element underlying said ramps, each of said ramps consisting of a plurality of wheel-supporting members, each of said members being substantially rectangular in plan and each being disposed with its longitudinal dimension extending transversely of the length of the underlying base element and from side to side thereof and said members being graduated as to height, each of said members being secured to said flexible base element, and said base element being extended longitudinally beyond the lower end of each of said ramps.

EVERT J. WENDELL.