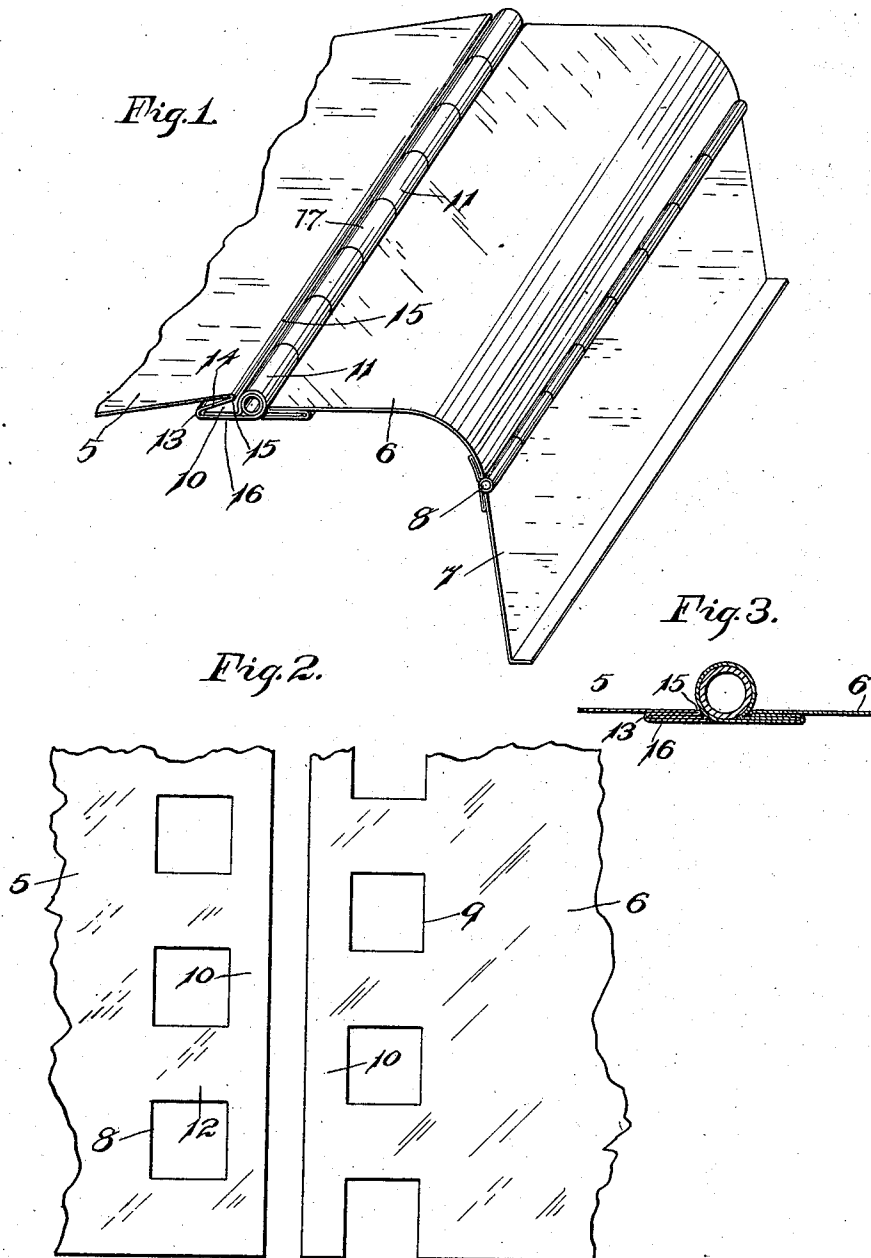


P. M. BUSH.
HINGE.

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1,014,372.

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WITNESSES:

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HINGE.

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To all whom it may concern:

Be it known that I, PHILIP M. BUSH, a citizen of the United States, and a resident of Hartford, in the county of Hartford and State of Connecticut, have invented a new Improvement in Hinges, of which the following is a specification.

My invention relates to the class of articles above named, and the object of the invention is to provide a device of this kind having novel features of advantage and utility.

A form of device in the use of which the objects herein set out among others may be attained is illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a portion of a hood for the engine of an automobile showing my improved hinge applied thereto. Fig. 2 is a detail view showing a portion of the edges of a plate constructed to form my improved hinge. Fig. 3 is a detail view in cross-section through the hinge.

While my device is not limited to any special form of a hinge it is peculiarly adapted for use on structures where the members of the hinge are integrally formed at the edge of a sheet of metal, such a structure being embodied in the hood for the engine of an automobile, and for this reason I have selected such a structure for the purpose of illustration and description of my invention herein.

In the drawings the numeral 5 denotes one side of the top of a hood and 6 the opposite side thereof, these two sides being joined at the center of the hood by a hinge of my improved construction.

The numeral 7 denotes one of the side parts of the hood joined to the upper part 6 as by a hinge 8 as shown herein.

In constructing the hinge the plates 5—6 are first formed with openings 8—9, as shown in Fig. 2, these openings providing bars 10 extending the full length of the structure. The edge of each plate 5 and 6 is formed in a manner similar to the other, and a description of the formation of one will therefore be understood as applying equally to the formation of the other. The plate 5 is curved to form knuckles 11, these knuckles being composed of the cross-pieces 12 between the openings 8. The bar 10 be-

yond the knuckle is extended on to the flat portion of the plate. The plate is bent as at 13, having a part 14 extending backwardly upon itself, and it is bent again as at 15, the main body of the plate lying above the part 14 as plainly shown in Fig. 1, in this figure the plate 5 showing the bend or crimp in a preliminary step, and before it is finally set to place, the plate 6 showing the hinge as completed. The bar or edge 10 of the plate lies between the folds 14 and 16 of the plate and the bent edge 15 is forced securely into the angle between the bar 10 and the curved part of the knuckle, and is thus held by the knuckle securely against displacement. The edge or bar 10 is thus securely held in place, and a hinge is thus formed of extreme strength and without rivets or like members to hold the parts in place. The knuckles 17 on the plate 6 are formed in a similar manner, the openings, however, being staggered with respect to the openings on the plate 5, as shown in Fig. 2 to allow the necessary meshing of the knuckles on one part into the space between the knuckles on the opposite part.

I have shown herein the preferred form of construction and embodiment of my invention, but this may be departed from to a greater or lesser extent and yet be within the spirit and intent of the invention.

I claim—

1. A hinge leaf having a knuckle formed by a turned over portion of the edge resting upon the main part thereof, and a bend in the main part of the leaf holding said edge in place.

2. A hinge leaf having a knuckle formed by a turned over portion of the edge resting upon the main part of the leaf, and a bend in the main part of the leaf overlying said edge to hold it in place, said bend being forced into the angle between the knuckle and edge to retain said bend in position.

3. A hinge leaf having a knuckle formed by a turned over edge resting upon the main part of the leaf, a bend including one part extending toward the knuckle and another portion extending away from the knuckle, said bend being closed upon said edge to hold it in place.

4. A hinge leaf having a knuckle formed by a turned over portion of the edge resting upon the main part of the leaf, a bend in the main part of the plate including a portion
5 extending toward the knuckle and another part extending away from the knuckle, said parts being closed down to hold said edge in place, and the bend pressed into the angle underneath the rounded part of the knuckle to hold said bent portion in place.

PHILIP M. BUSH.

Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."