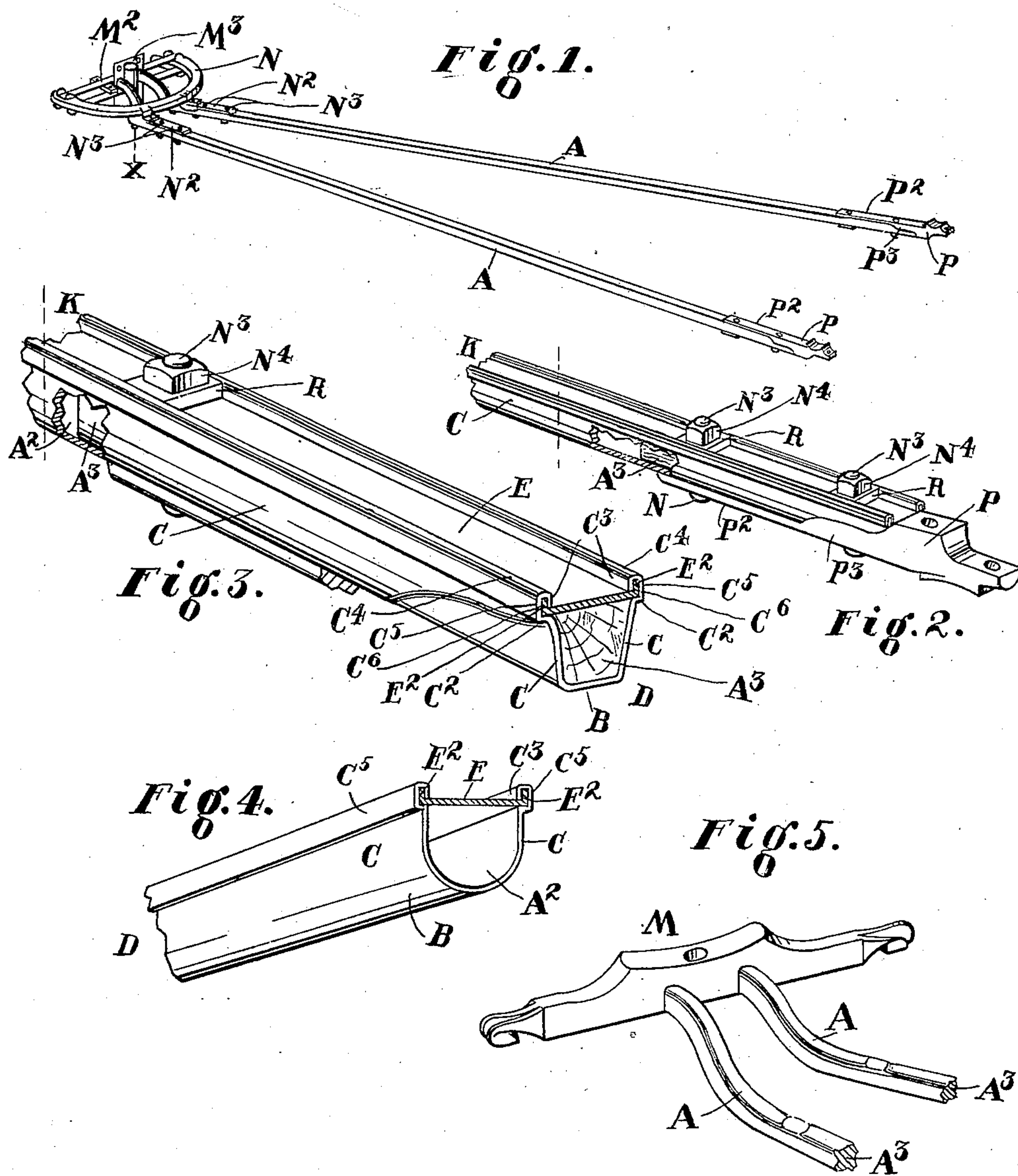


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H. HIGGIN.
PERCH FOR ROAD VEHICLES.
APPLICATION FILED NOV. 8, 1906.



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PERCH FOR ROAD-VEHICLES.

No. 862,736.

Specification of Letters Patent.

Patented Aug. 6, 1907.

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To all whom it may concern:

Be it known that I, HENRY HIGGIN, a citizen of the United States, and a resident of the city of Newport, in the county of Campbell and State of Kentucky, have invented certain new and useful Improvements in Perches for Road-Vehicles, of which the following is a specification.

In the following specification and claims, wherever the word perches is employed, it is to be understood to include reaches.

The several features of my invention and the various advantages resulting from their use conjointly or otherwise will be apparent from the following description and claims.

In the accompanying drawing making a part of this application, and in which similar letters of reference indicate corresponding parts,—Figure 1 is a view in perspective of a pair of perches each embodying my invention, and connected at one end to a fifth wheel, and at the other provided with the perch sockets. Fig. 2 is a perspective view enlarged of that end portion of either of the perches shown in Fig. 1, which is at the right hand in said Fig. 1. In Fig. 2, the said end portion of the perch is shown bottom side up. Fig. 3 is a perspective view, still more enlarged and nearly full size, of the end portion of the perch which is at the right hand in Fig. 1, but in this Fig. 3 the end present in Fig. 1 is removed. Fig. 4 shows, on about the same scale as of Fig. 3, the end of a perch containing a slightly modified form of the top of the perch. It is to be noted that in Figs. 2, 3 and 4, the under side of the perch is uppermost, for the purposes of more explicit illustration. Fig. 5 is a view in perspective, on a scale somewhat larger than Fig. 1, of the forward end portions of the perches and of a head block to which they are joined.

I will now proceed to describe my invention in detail. The shell of my improved perch is of metal. This metal is one that under great pressure can be successfully bent to shape, without weakening it at ordinary easy angles of curvature. When so bent, it will retain its shape and withal is then quite resilient. The flat metal blank is duly cut out to the requisite size and shape. The metal is then bent on both sides, and there will then be a back B and the sides C, C. The bending also includes bending each of the sides C, C, out at substantially a right angle to the plane of the side, thus forming on each side the ledge or shoulder C². The bending further includes bending the outer edge of this ledge or shoulder down at right angles to the shoulder C², thus forming the vertical portion C³. The bending is continued and the outer or free edge portion of this portion C³ is bent over and up, thereby forming the parts C⁴ and C⁵. There is now a space C⁶ between

the parts C², C³, C⁴ and C⁵. This device or shell thus formed I will indicate by the letter D. A second metal blank is now taken and its edges bent down, so that it is a piece having a back E and side flanges E², E². This piece having been made to a proper size is now combined with the shell D as follows: One of the side flanges E² is now inserted in the inclosed space C⁶ at one edge of the shell D, and the other of the side flanges E² is inserted in the other of the inclosed spaces C⁶, at the other edge of the shell D. The piece E, E², E² is now moved along under the respective spaces C⁶, C⁶, until the rear end of the piece E, E², E² coincides with the rear end of the shell D. The parts C³, C⁴ and C⁵ at each side are now compressed so as to pinch tightly the flange E² held within them. The part E, E², E², before mentioned, may be called the brace K. The combined structure consisting of the shell D and the brace K united as shown I term the perch A. This structure is exceedingly strong and resilient. It will stand all of the vertical, lateral and torsional strains to which road vehicles which employ perches or reaches are subjected. When relieved from such strain, it will return to its original position.

In Fig. 4, I have illustrated the preferred shape of the back. This shape does not differ materially from that shown in Fig. 3. It is more rounding, and presents a trifle more attractive appearance.

In the illustrative Figs. 1 and 5, the perches are shown bent up to meet the headblock.

In Fig. 5, the headblock M is shown as solid and the adjacent ends of the perches A and A enter therein.

In Fig. 1, the headblock M² is shown as a skeleton framework and the adjacent ends of the perches A and A are connected to a plate M³ fixed to this skeleton and made a part of it.

The perches will in ordinary cases pass under the fifth wheel N. They are suitably connected to the lugs N² of the fifth wheel preferably by bolts N³.

The rear ends of the perches A, A may be connected in any suitable manner and by any suitable connections intermediate or otherwise to the rear axle. In the illustration, Figs. 1 and 2, the rear ends of the perches are connected to what are known as perch or reach sockets. I have indicated these by the character P. The perch A sets up against the forward extension of the top plate P² of the socket and the rear portion of the perch enters between the side flanges P³, P³ of the socket. The bolts N³ connect the socket and the perch together. A convenient mode of applying these bolts is by locating a washer R between the ridges (beadings) C², C³, C⁴, C⁵ on the bottom of the brace K. The bolts N³ extend down through the perch and the washer, and are each duly secured by a nut N⁴ in the usual manner.

It is desirable that a filler of wood or other suitable

material be located within and fill the hollow space A² within the perch wherever a bolt is to pass through the perch. This wooden filler need not be elsewhere used. Thus I prefer to employ a wooden filler at the rear part 5 of the perch which is where those bolts N³, N³ pass through to connect the perch to its rear perch socket. Where the perch enters between the side flanges P³, P³ of the socket, it is preferably contracted or compressed somewhat. Such contractions or compressions A³ are 10 shown in Fig. 3. These contractions are readily made and the wood filler takes the impression and retains it. The perch is not weakened by these impressions. The wood filler is condensed and apparently strengthened. So also I prefer to employ a filler in the forward portions 15 of the perch where the same receives the bolts N³ whereby it (the perch) is connected to the fifth wheel. And where desired, a filler of wood, vulcanized fiber or other material may extend up within the perch to the headblock, when the metal of the perch extends to that 20 place. The perches are preferably continued to the headblock. But the perch is a useful and a valuable one if it stop at the fifth wheel, and any connection between this end of the perch and the headblock be made as desired. Wooden extensions starting from the filler 25 may extend from the ends of the metal perches at the fifth wheel to the headblock.

As before mentioned, lightness of weight, great strength and great resiliency in this perch are the primary advantages I derive from this improved construction. 30

What I claim as new, and of my invention and desire to secure by Letters Patent, is:—

1. A perch consisting of a shell D made of sheet metal bent and consisting of a back B, sides C, C, the latter provided with shoulders C², C², bent down and over and 35 up forming the parts C³, C⁴ and C⁵, inclosing a space C⁶, and a brace K made of sheet metal and having the back E and its edge flanges E², E², the latter respectively located in the spaces C⁶, C⁶, of the shell D, the hollow bead or ridge C³, C⁴, C⁵ being clamped tightly upon its adjacent 40 flange E², substantially as and for the purposes specified.

2. A perch consisting of a shell D made of sheet metal bent and consisting of a back B, sides C, C, the latter provided with shoulders C², C², bent down and over and 45 up forming the parts C³, C⁴, and C⁵, inclosing a space C⁶, and a brace K made of sheet metal and having the back E and its edge flanges E², E², the latter respectively located in the spaces C⁶, C⁶, of the shell D, the hollow bead or ridge C³, C⁴, C⁵ being clamped tightly upon its adjacent 50 flange E², in combination with a filler, substantially as and for the purposes specified.

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Attest:
WM. H. PUGH,
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