

(No Model.)

H. B. DYE.

BAR OR PLATE FOR ELLIPTIC SPRINGS.

No. 315,920.

Patented Apr. 14, 1885.

Fig 2.

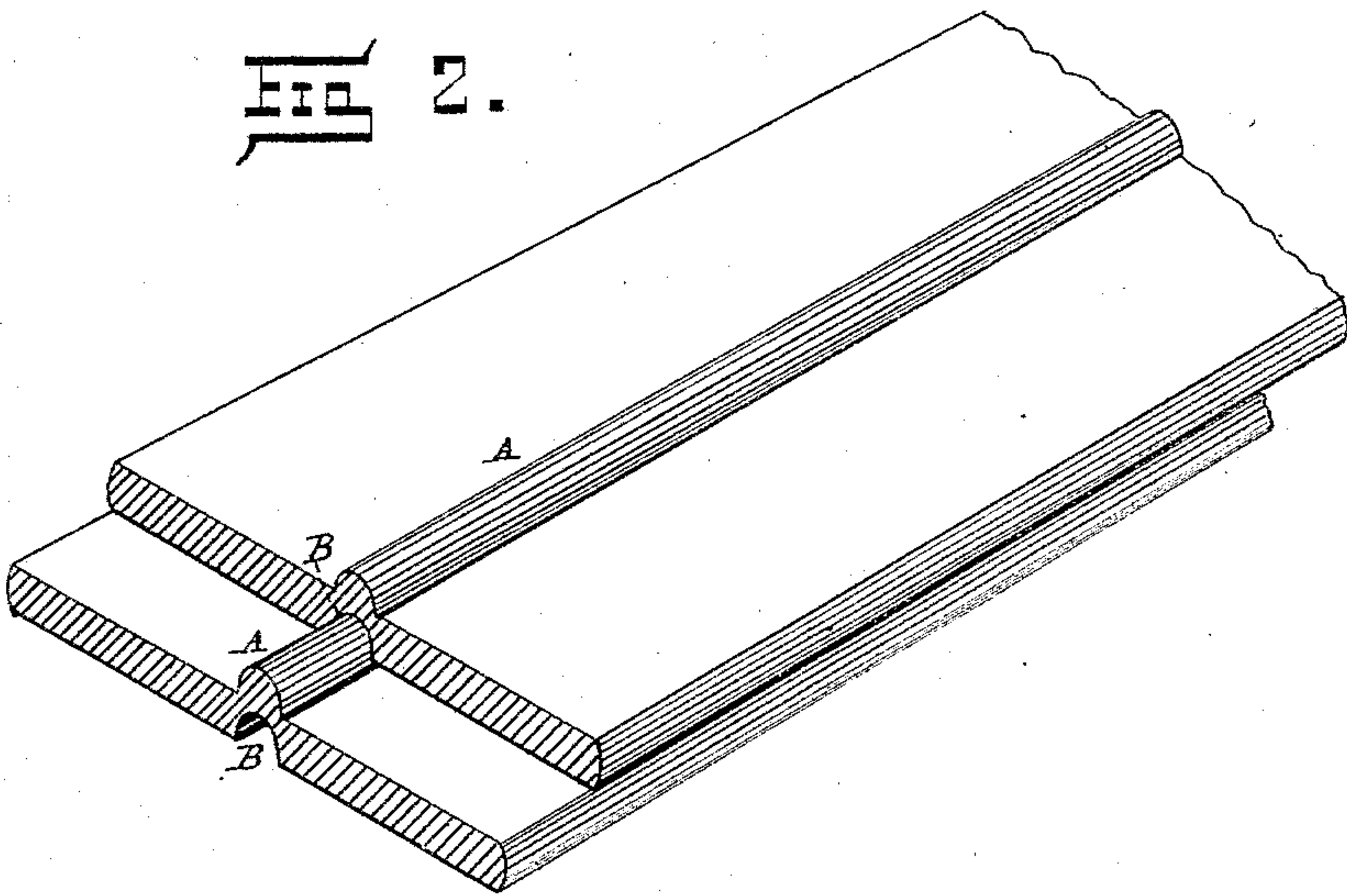
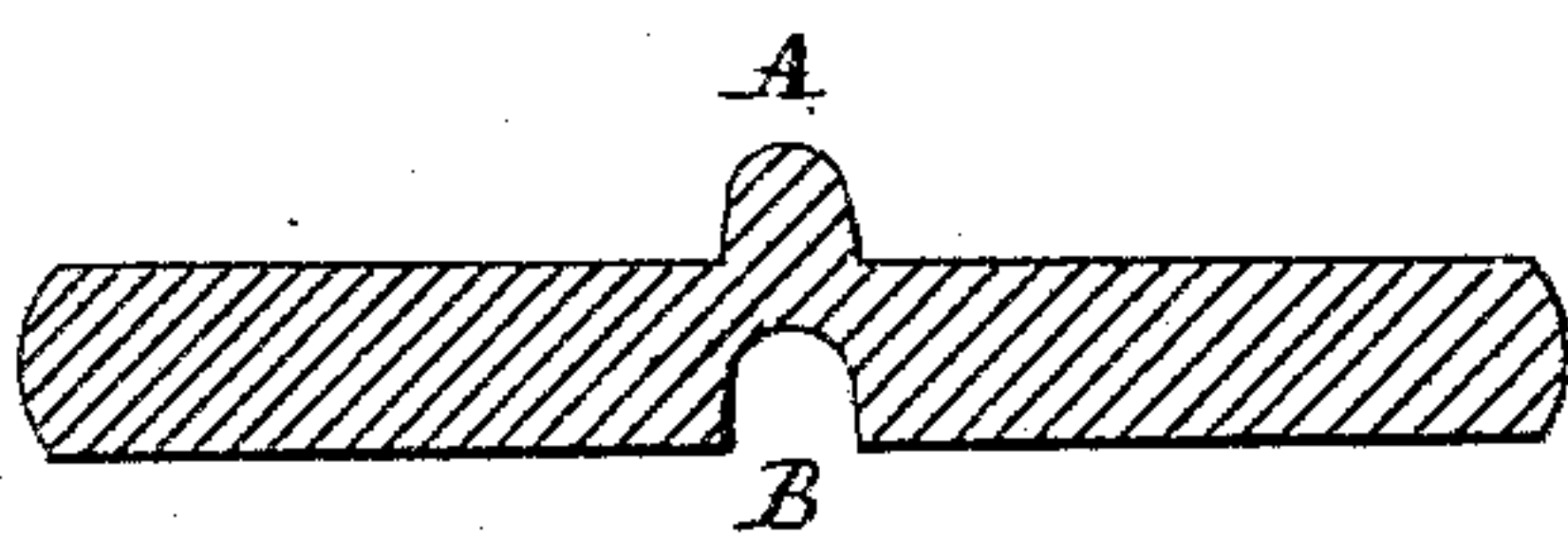


Fig 1.



WITNESSES

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# UNITED STATES PATENT OFFICE.

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## BAR OR PLATE FOR ELLIPTIC SPRINGS.

SPECIFICATION forming part of Letters Patent No. 315,920, dated April 14, 1885.

Application filed July 24, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY BAXTER DYE, a citizen of the United States, residing at Marquette, in the county of Marquette and State of Michigan, have invented certain new and useful Improvements in the form of Steel Bars or Plates for use in Construction of Elliptic Springs or Half-Elliptic Springs; 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.

Heretofore steel bars or plates for use in construction of elliptic springs or half-elliptic springs have been manufactured in plain flat bars or plates of different widths and thicknesses adapted to the capacity of the spring required.

My invention relates to improvements in the form of steel bars or plates for use in construction of elliptic springs or half-elliptic springs, and springs constructed of one or more leaves or plates for all kinds of vehicles.

The object of my invention is to produce steel bars or plates of such a novel form of construction that when used in the manufacture of elliptic springs or half-elliptic springs each plate or leaf in the spring must always keep its proper place directly over its fellow, and can never get out of place; second, to diminish the weight of material in the steel bars or plates required for use in construction of springs of any required capacity to the lowest minimum consistent with strength and safety; third, to produce steel bars or plates for use in construction of springs from less weight of material than heretofore required for like results, at the same time preserving the necessary flexibility and elasticity.

Steel bars or plates manufactured after the form of my invention effect a saving in the weight of material of from ten to twenty-five per cent. in the production of springs of equal capacity to those springs manufactured from plain bars or plates now in use.

My invention relates to the form of steel

bars or plates for use in the manufacture of elliptic springs or half-elliptic springs, and will be understood by reference to the accompanying drawings, in which—

Figure 1 represents a transverse section of the bar or plate, A indicating a rib and B a groove. Fig. 2 shows portions of two bars or plates, and illustrates the manner the ribs fit into the grooves when one bar or plate is laid upon the other.

I form two or more ribs in the bar or plate with corresponding grooves for the heavier classes of springs. The position of the ribs and the corresponding grooves will be determined by the width of the bar or plate. With three ribs I form a rib on either side of the central rib, and at a distance from the central rib of one-quarter of the width of the bar or plate. With two ribs I form them on the bar or plate one-third of the width of the bar from either edge, and the same distance from each other. It is to be understood that in all cases the grooves are formed on the opposite side of the bar, and that they exactly correspond and coincide in size and shape with the ribs throughout the length of the bar or plate. For the lighter kinds of springs the bars or plates may be corrugated.

Having fully described my improvement, what I claim as new, and desire to secure by Letters Patent, is—

A steel bar or plate for use in the manufacture of elliptic springs and half-elliptic springs, having the rib A and the groove B on opposite sides of the bar or plate, the rib and groove being essentially counterparts in size and shape, located the one over the other and running the entire length of the bar or plate, substantially as shown and described.

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

HENRY BAXTER DYE.

Witnesses:

B. W. WRIGHT,  
L. M. PACKARD.