

(No Model.)

I. LEMIEUX.
WOODEN SHOVEL.

No. 525,149.

Patented Aug. 28, 1894.

Fig. 1.

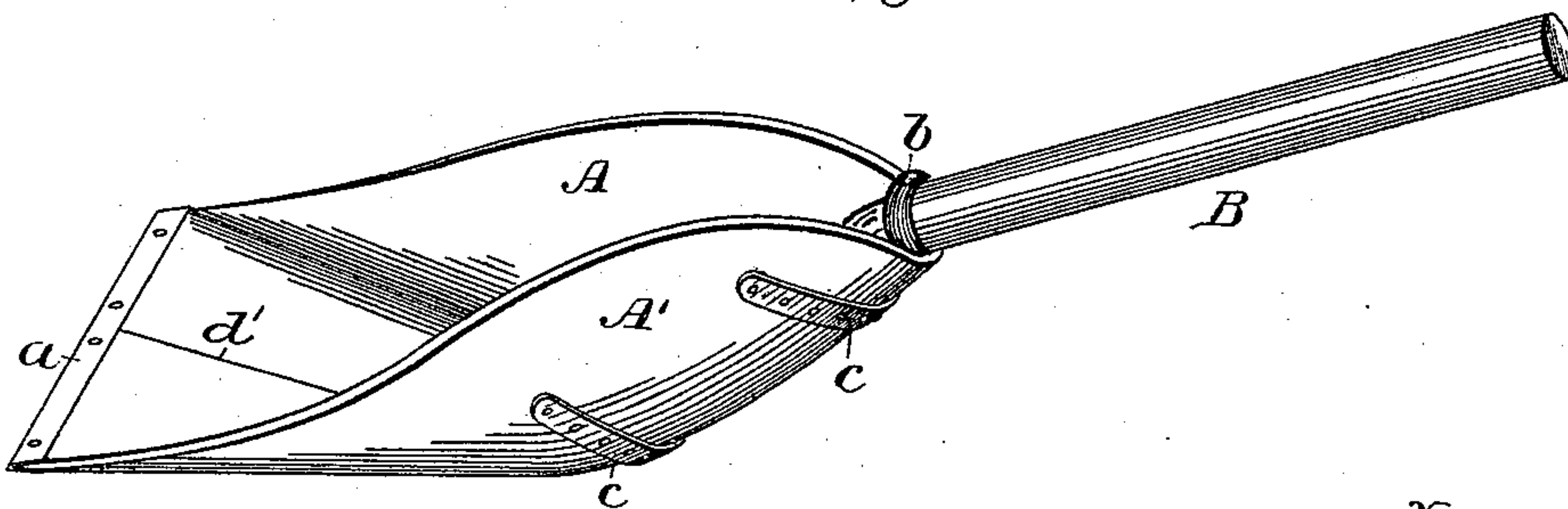


Fig. 2.

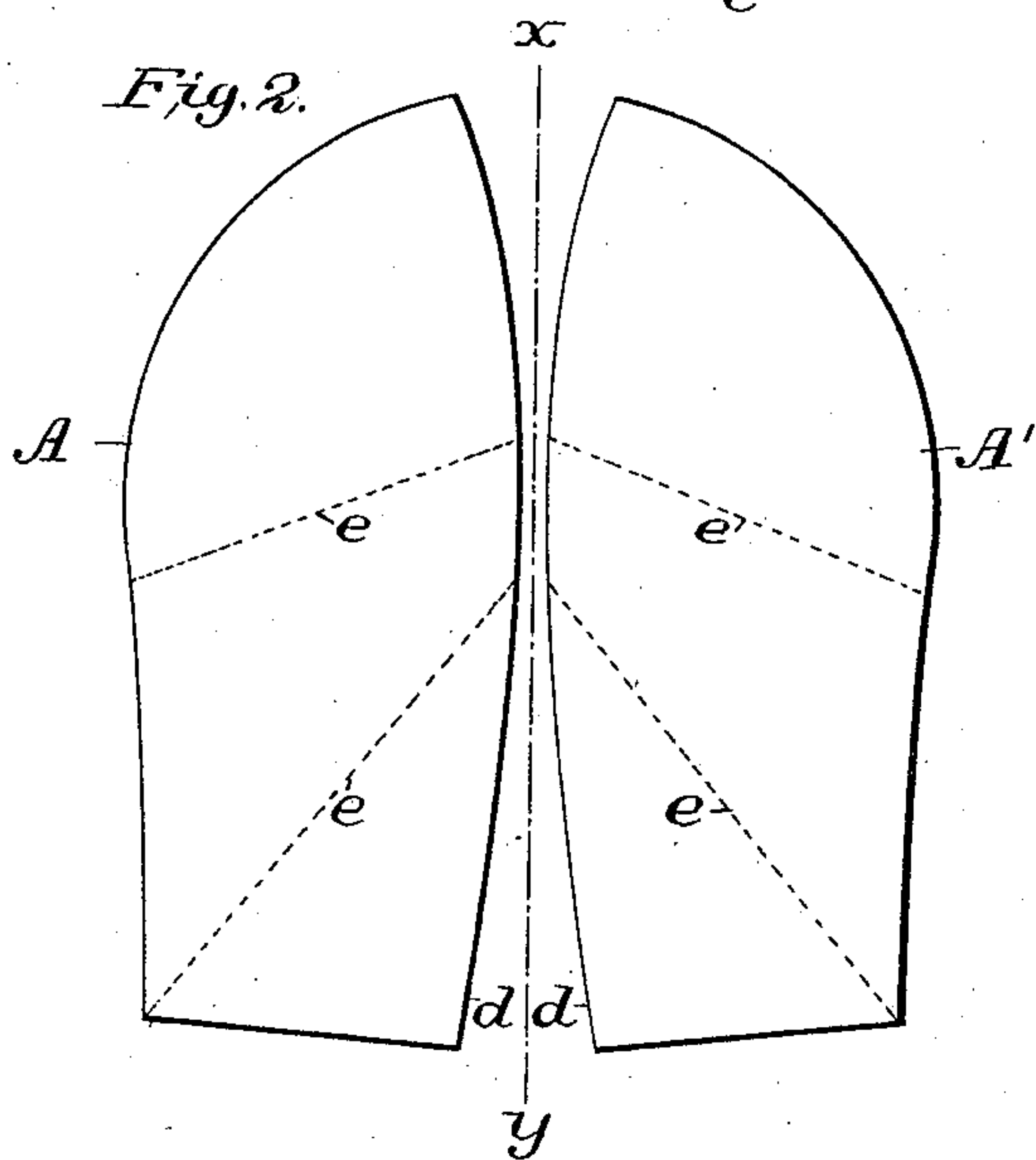
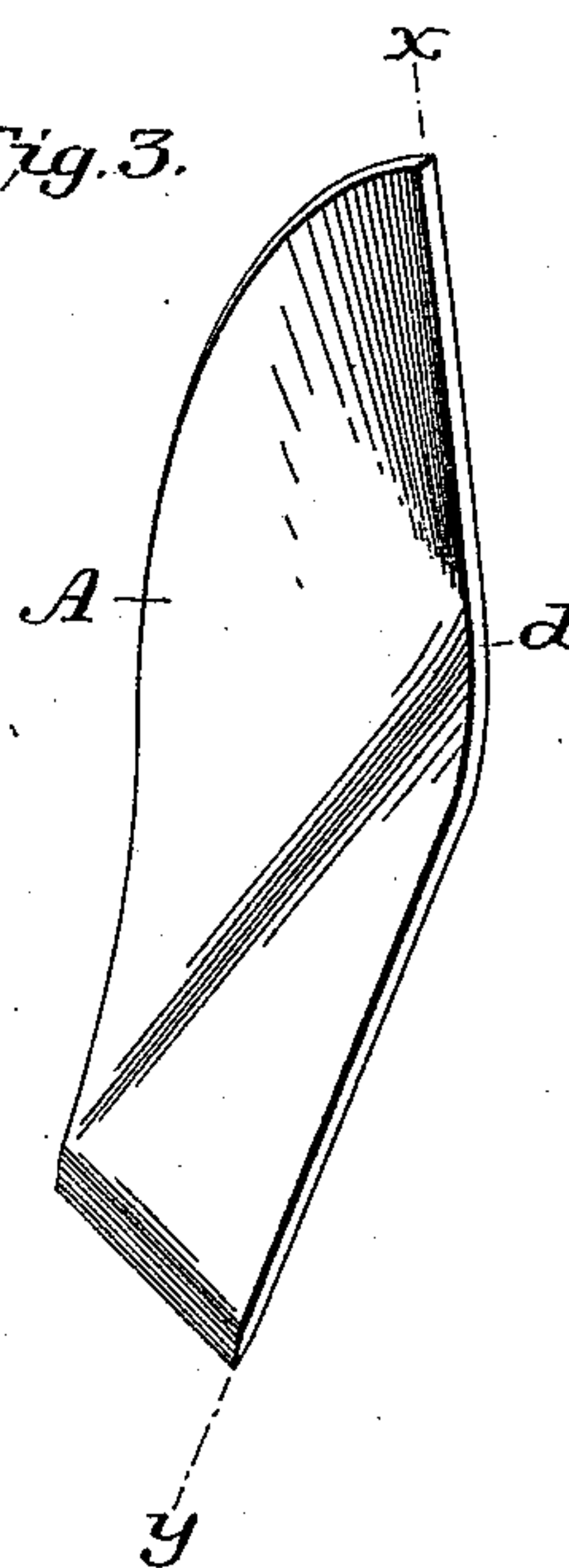


Fig. 3.



Witnesses:

H. H. Duffy
J. H. McCreary

Inventor:

Ismael Lemieux
per W. S. Boucklin
attorney

UNITED STATES PATENT OFFICE.

ISRAEL LEMIEUX, OF FOND DU LAC, WISCONSIN.

WOODEN SHOVEL.

SPECIFICATION forming part of Letters Patent No. 525,149, dated August 28, 1894.

Application filed December 1, 1893. Serial No. 492,552. (No model.)

To all whom it may concern:

Be it known that I, ISRAEL LEMIEUX, residing at Fond du Lac, in the county of Fond du Lac and State of Wisconsin, have invented a new and useful Wooden Shovel, of which the following is a specification.

My invention relates to shovels or scoops made of wood steamed and formed into the proper shapes as to the parts forming the whole when united; and the objects of my improvement are, first, economy in material and labor; second, an automatic variation in the depth and capacity of the scoop, adapted to its various uses as hereinafter shown; and third, to provide certain elements of strength and solidity in the blade of the shovel, as hereinafter noted. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1, is a perspective view of the machine. Fig. 2, is a delineation of the counter blanks from which the whole blade is made. Fig. 3, is a view in perspective of one of the blades after shaping in the former.

Similar letters refer to similar parts throughout the several views.

The blade A A', handle B, shoe *a*, and clips and straps *b*, *c*, *c* constitute the devices, Fig. 1. I first cut from thin, flat, pieces of timber straight grained and suitable, a pair of blanks the exact counterparts of each other, A A' Fig. 2. These are curved, more or less, on their inner and meeting edges, *d d*. By means of a proper former, (after steaming) I bend or form these counter-blades respectively about on the dotted lines *e, e*, until their inner edges *d, d* are brought to a common plane, or into alignment with each other—(*x, y*, dotted lines)—so that when these edges *d d* respectively are brought together they will match and form a perfect joint throughout, *d'*, and constitute together when so joined a shovel or scooped blade A, A', *d'*. I provide a shoe, *a*, of metal, preferably, a strip bent in form of \angle on cross-section, and riveted to the toe of the shovel throughout its length. The blade A A', *d'*, having been so constructed by the forming and joining the counterpart pieces or blades A, A' *d'*, is provided with a suitable handle B, attached by means of clips *b*, and straps *c, c*, or in other well known manner.

Referring to the second object, above, to-wit: an automatic variation in the dish or scoop of the shovel blade, it will be observed that the depth of such dish or scoop will be governed by, and depends upon, the curvature of the inner edges *d d* of the blades when cut in blanks A, A'. The greater this curvature, the greater will be the dish or scoop in the whole blade. This is important because different shapes or grades of scoops are desirable for the handling of different materials, as snow, grain, vegetables, &c.

I claim thirdly, above as an object of my improvement certain elements of strength and solidity in my device, and this is, that the timber is or should be straight grained lengthwise of the blanks or blades and the forming or bending must, necessarily for bringing the edges *d d* of the counter blades in an alignment, be always obliquely across the grain, and there can be no folding, rolling or bending with the grain of the timber—the whole shovel blade has no lateral curvature or strain whatever—the form is more in the nature of a twist or diagonal bend. This feature besides giving greater strength throughout, further admits of slotting or perforating the blade without danger of splitting the dividing spaces of the wood; also, as will be seen, any great weight or strain on the inner surface of the blade entire, will have the tendency of pressing together, instead of separating the joint *d'*.

The shoe, *a*, the clips *b*, and straps *c c*, as is apparent, are adapted to hold together and fasten the counter blades A, A', as well as the handle B.

I am aware that prior to my invention shovels of wood have been made of several sections or parts, doweled, strapped or nailed together, and made of wood steamed, and rolled or curved. I therefore do not claim such a combination broadly.

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

1. A wooden scoop shovel, with whole blade, composed of two counterpart half blades, each, cut curving on inner edge, *d*, and bent upward on a line, *e*, drawn—diagonally across the grain—from the center of curved edge, to a point near the lower outer corner, and thus brought respectively to a plane, longitudi-

nally, as to inner edge, and aligned in a close joint, *d'*.

2. The combination in a wooden scoop shovel of the blades formed by two counter-
5 part half blades, cut curving on inner edges, bent upward, and joined by alignment of inner edges, *b, b*,—with metallic shoe, and straps securing the joint, and provided with a han-

dle, attached to upper inside middle, by means of clips and straps, as shown and described. 10

ISRAEL ^{his} × LEMIEUX.
mark

Witnesses:

A. M. BLAIR,
F. F. DUFFY.