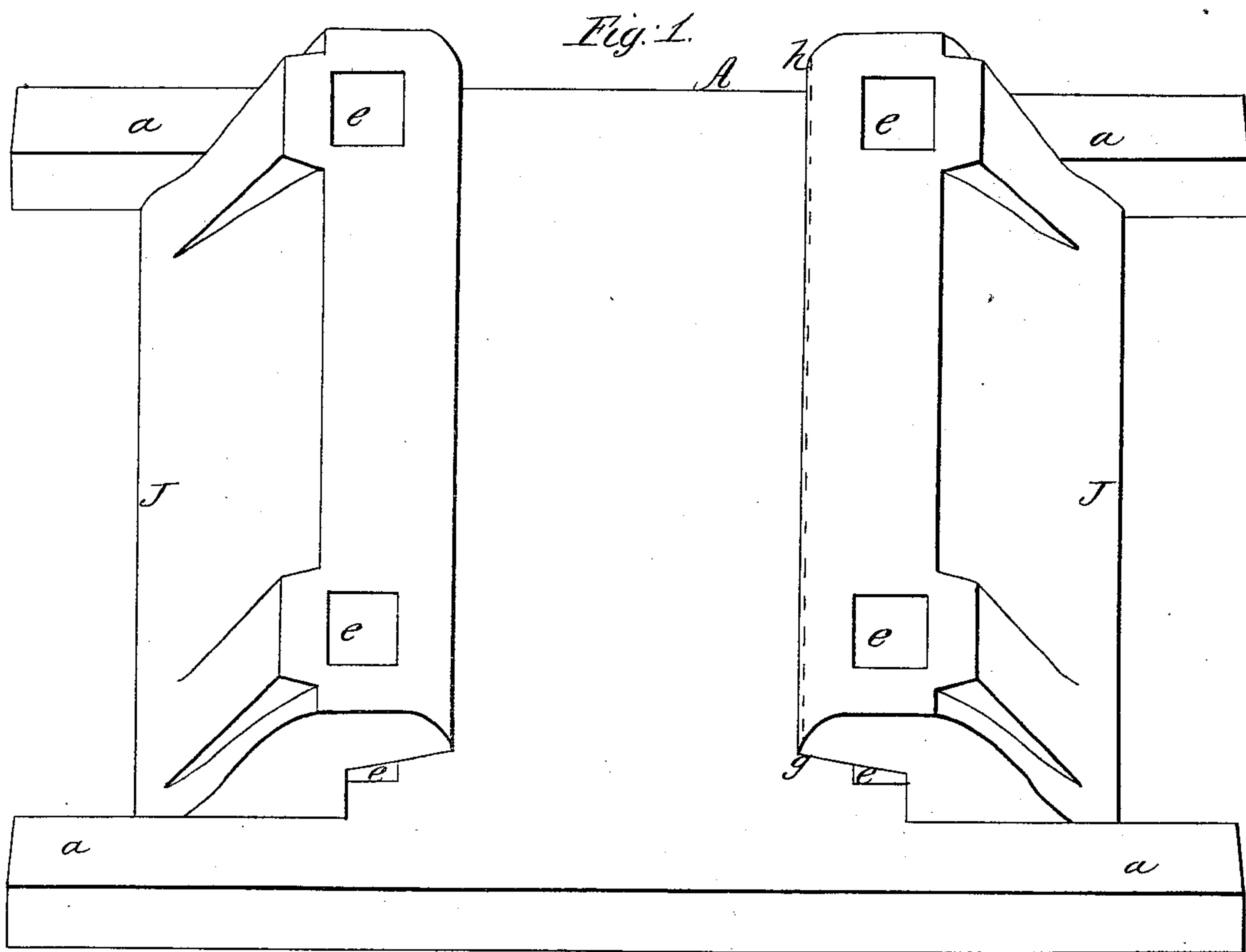
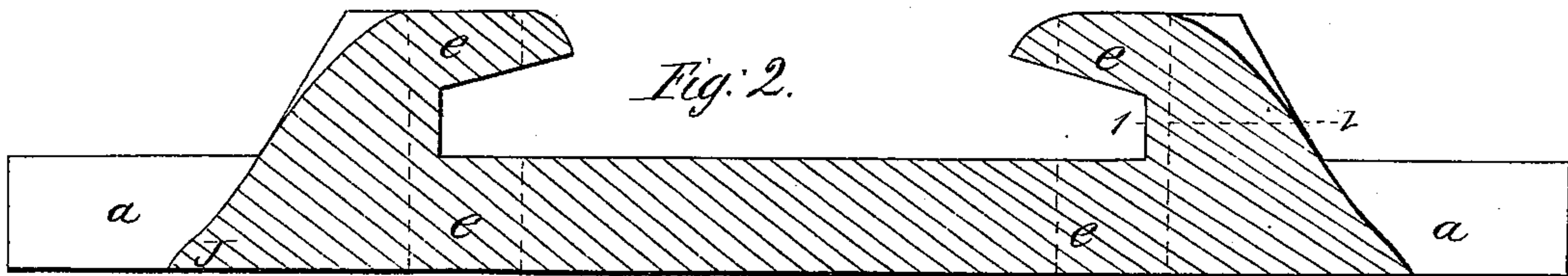


W. Van Anden.

Railroad Chair.

N^o 85,347.

Patented Dec. 29, 1868.



Witnesses;
Hudson M. Leavelle,
Robert N. Palmer

Inventor;
William Van Anden

United States Patent Office.

WILLIAM VAN ANDEN, OF POUGHKEEPSIE, NEW YORK.

Letters Patent No. 85,347, dated December 29, 1868.

IMPROVED RAILWAY-RAIL CHAIR.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, WILLIAM VAN ANDEN, of Poughkeepsie, in the county of Dutchess, and State of New York, have invented a new and improved Railroad-Chair; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

This invention relates to an improved form of construction of my railroad-chair, patented September 18, 1866, and

It consists in providing a chair having corner bearing-flanges with a perforated projecting base between them, by means of which great additional width and stiffness is obtained, and the chairs are thus prevented from rocking and cutting into the cross-ties on which they are placed. It is designed to be an improvement upon the folded-lip chair, having all its advantages without its disadvantages.

To enable those skilled in the art to which my invention appertains to make and use the same, I will proceed to describe more fully its construction.

Figure 1 is a perspective view of the chair, and

Figure 2, a sectional view across the centre.

I first take a wrought-iron plate, A, of suitable size and thickness, and slit or cut it upon each edge, near the ends of the plate, so that the corners *a a* are formed, the cut being made further in towards the centre upon its upper side than upon its lower, as is shown in fig. 1.

That portion of the metal which occupies the centre space between the slits is then formed, by a swaging

process, into a hooked flange, which bends towards the centre of the plate, as is shown in the figures.

Instead, however, of simply turning up the metal in the centre, as is the case in the folded-lip chair, I form a base, J, by the swaging process, which serves, with the bearing-flanges *a a*, to give great stiffness to the chair when it is in position.

The line from 1-Z, in fig. 1, shows the greatest thickness of the lip in the ordinary chair.

The remaining portion J, it will be seen, gives a bearing-surface at the point where it is most needed.

e e represent spike-holes, which are found in the lips and base, so that the bearing-flanges are left uncut. The position of these may, of course, be varied to suit the rail.

By this construction, a wrought-iron chair is formed, with the grain of the metal running in the proper direction to resist the strain, as is shown by the lines in fig. 1, and a largely-increased bearing-surface is obtained in the same size of chair.

Having thus fully described my invention,

What I claim, and desire to secure by Letters Patent of the United States, is—

The chair A, constructed as described, and having the bearing-flanges *a a*, inclined sides J J, and perforations *e e*, all constructed and arranged as and for the purpose described.

WILLIAM VAN ANDEN.

Witnesses:

HUDSON M. DEANE,
ROBT. N. PALMER.