

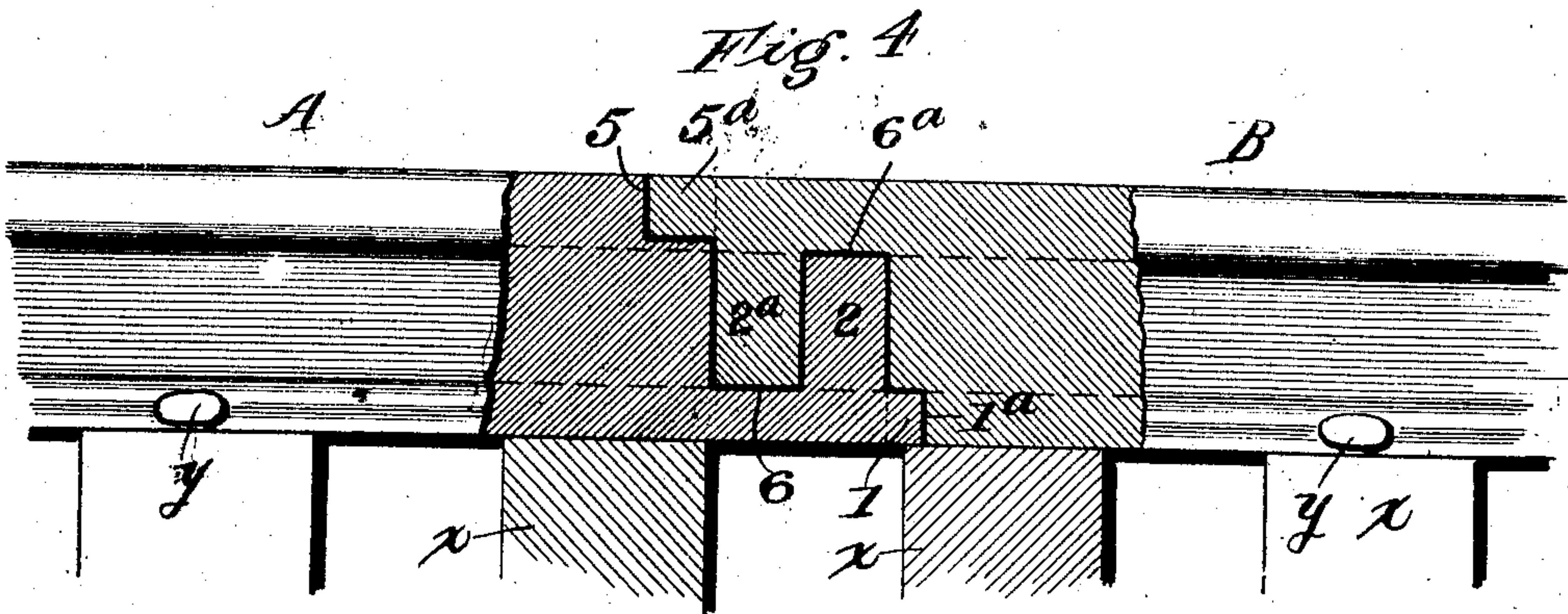
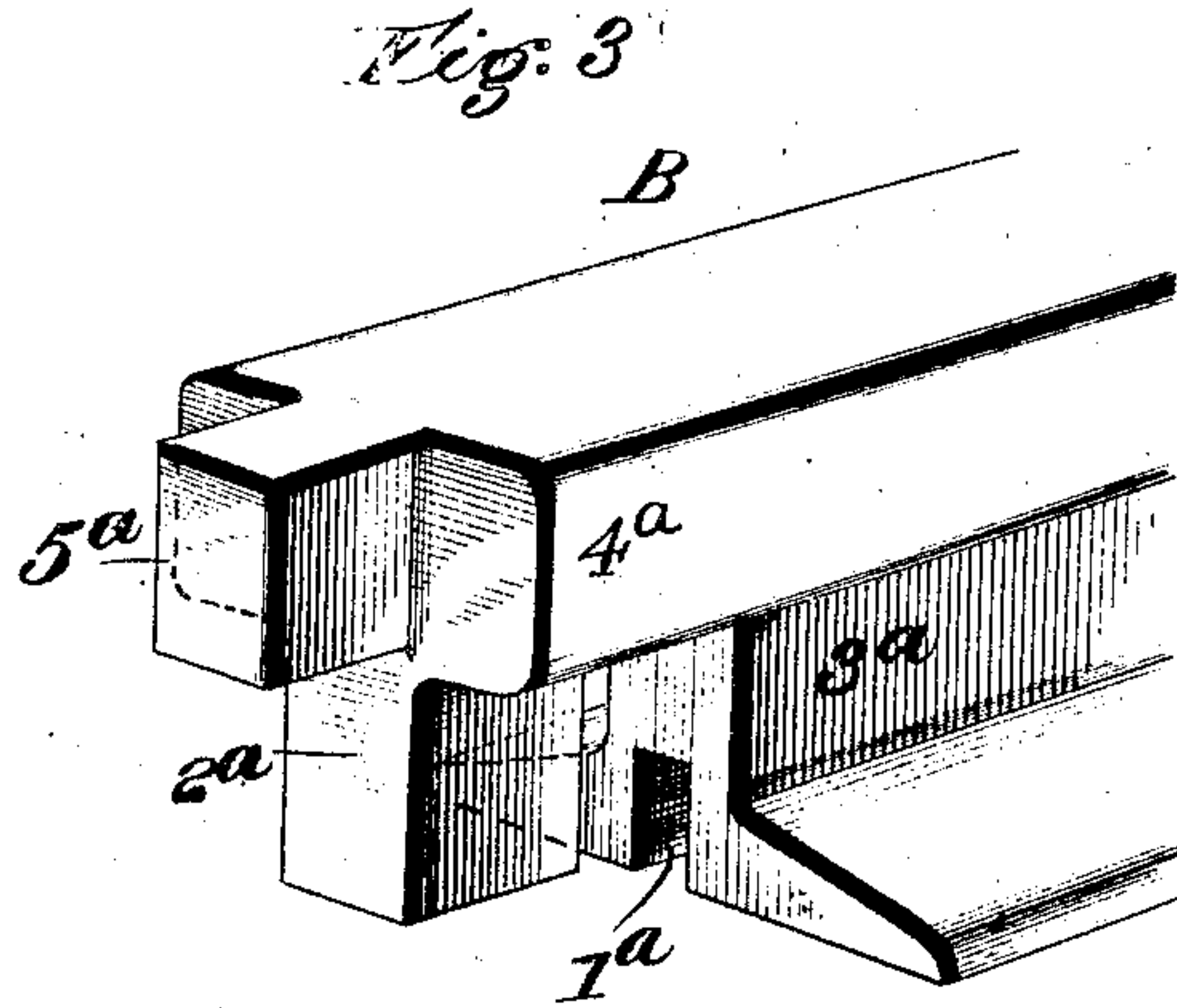
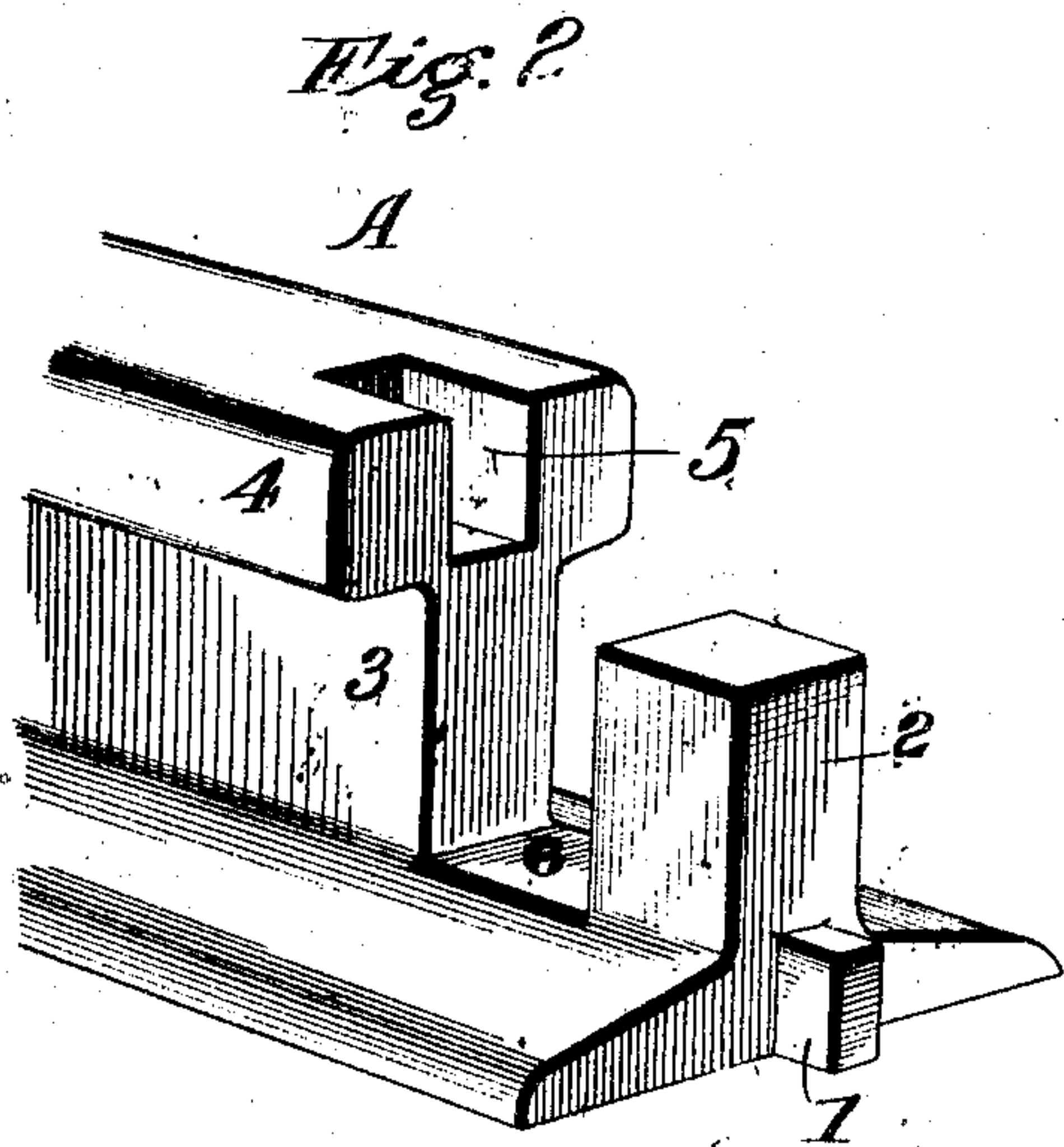
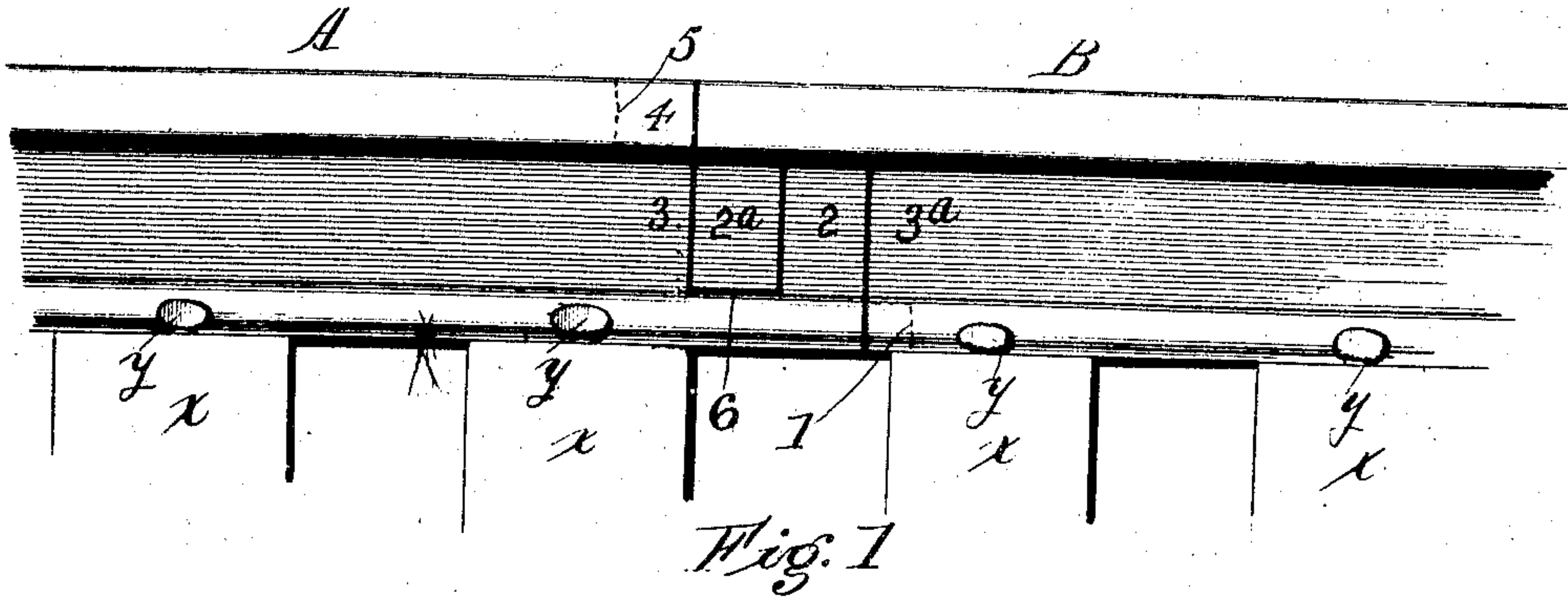
No. 850,712.

PATENTED APR. 16, 1907.

J. C. ABBOTT.

RAIL JOINT.

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JOHN C. ABBOTT, OF PITTSBURG, PENNSYLVANIA.

RAIL-JOINT.

No. 850,712.

Specification of Letters Patent.

Patented April 16, 1907.

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To all whom it may concern:

Be it known that I, JOHN C. ABBOTT, a citizen of the United States, and a resident of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented an Improved Rail-Joint, of which the following is a specification.

The object of my invention is to provide railroad-rails with an improved form of joint whereby their meeting ends are firmly yet detachably connected without the use of fish-plates and bolts or other form of fastening independent of the rails themselves.

The improvement is embodied in the form, construction, and arrangement of the engaging or interlocking portions of the meeting rail ends, as hereinafter described, and shown in the accompanying drawings, in which—

Figure 1 is a side view of the meeting ends of rails constructed and connected according to my invention. Fig. 2 is a perspective view of the end portion of one of the rails, and Fig. 3 is a corresponding view of the end portion of the other rail. Fig. 4 is a sectional view of the rails connected as in Fig. 1.

A and B indicate the ends of railroad-rails, which save as to their engaging portions may be constructed in the usual form and proportions. It will be noted that the head and web of the rail A are cut away, thus leaving a projecting base portion, which is provided at the end with a tenon 1. Adjacent to the tenon is a vertical post 2, which is spaced from the web 3 and has a flat top. The head 4 of the rail A is provided with an end socket 5. The rail B has an overhanging or top portion formed by an extension of the head 4^a and is provided with an end tenon 5^a, adapted to enter the socket 5 of the rail A, and adjacent to said tenon is a pendent prong 2^a, which is adapted to enter the space between the post 2 and web 3 of the rail A, said prong 2^a being spaced from the adjacent web 3^a of the rail B. The lower end of the prong 2^a is flat, and when the rails are locked together, as shown in Figs. 1 and 4, the prong 2^a rests upon the flat portion 6, that intervenes the post 2 and web 3 of the rail A, while the corresponding post 2 of the rail A is in contact with the under side 6^a of the rail B. (See Fig. 4.) The end of the base of rail B is provided with a socket 1^a, which is adapted to receive the tenon 1 of rail A, said socket being open on the under side as well as at the outer end.

It will now be seen that if the rail B be

raised and its projecting top portion be brought over the projecting base portion of rail A and then lowered vertically the rails will be engaged or interlocked, as shown in Figs. 1 and 4. Thus the tenon 1 of rail A and tenon 5^a of rail B entering the corresponding sockets 1^a and 5, will prevent the lateral movement or sidewise movement of the rails on each other, while the engagement of the post or abutment 2 of the rail A with the pendent prong or portion 2^a of rail B will prevent endwise movement of the rails. It will be perceived that when the rails are engaged, as shown in Figs. 1 and 4, the tenon 5^a of the rail B will rest upon the base of the socket 5 of the rail A and the base of prong 2^a of rail B will rest upon the base portion 6 of rail A, while the upper end of the post 2 will bear against the under side of the head of rail B, and the top portion of the base-socket 1^a in rail B will also bear upon the top of the tenon 1 of rail A. Thus the weight applied by the wheels of a passing train will be imposed directly upon the overhanging portion of rail B, and thereby upon the underlying portions of the rail A. The rails thus interlocked are secured upon ties *x* by means of spikes *y* in the usual way. The described construction of the interlocking end portions of the rails may be produced by means of stamping-dies in the process of manufacturing the rails.

I thus provide a rail-joint which is so constructed that it is strong and not liable to injury in use, which enables the rails to be quickly put together or detached, and requires no supplemental fastening, such as fish-plates and bolts, for preventing endwise or sidewise movement. The joint may be also cheaply produced in manufacture.

I claim—

1. A rail-joint comprising a rail end having its head and web cut away thus leaving a projecting base portion which is provided with an end tenon and an adjacent vertical post that is separated from the web, the head of the rail having a socket open at the top, and the other rail end having an overhanging head or top portion, the head provided with an end tenon, and an adjacent pendent prong that is spaced from the web and base, the latter having an end socket that is open on the under side, whereby the two rail ends are adapted to fit together and interlock as shown and described.

2. A rail-joint formed by the combination

of the rail ends whose heads are provided, respectively, with an end socket and tenon and with a vertical post and a pendent prong adapted to engage each other, the parts being thus adapted for engagement when one rail end is dropped upon the other, the tenon thus resting on the base of the socket and the prong upon the base of the opposite rail

while the post is in contact with the overhanging head of the other rail, as shown and described.

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Witnesses:

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