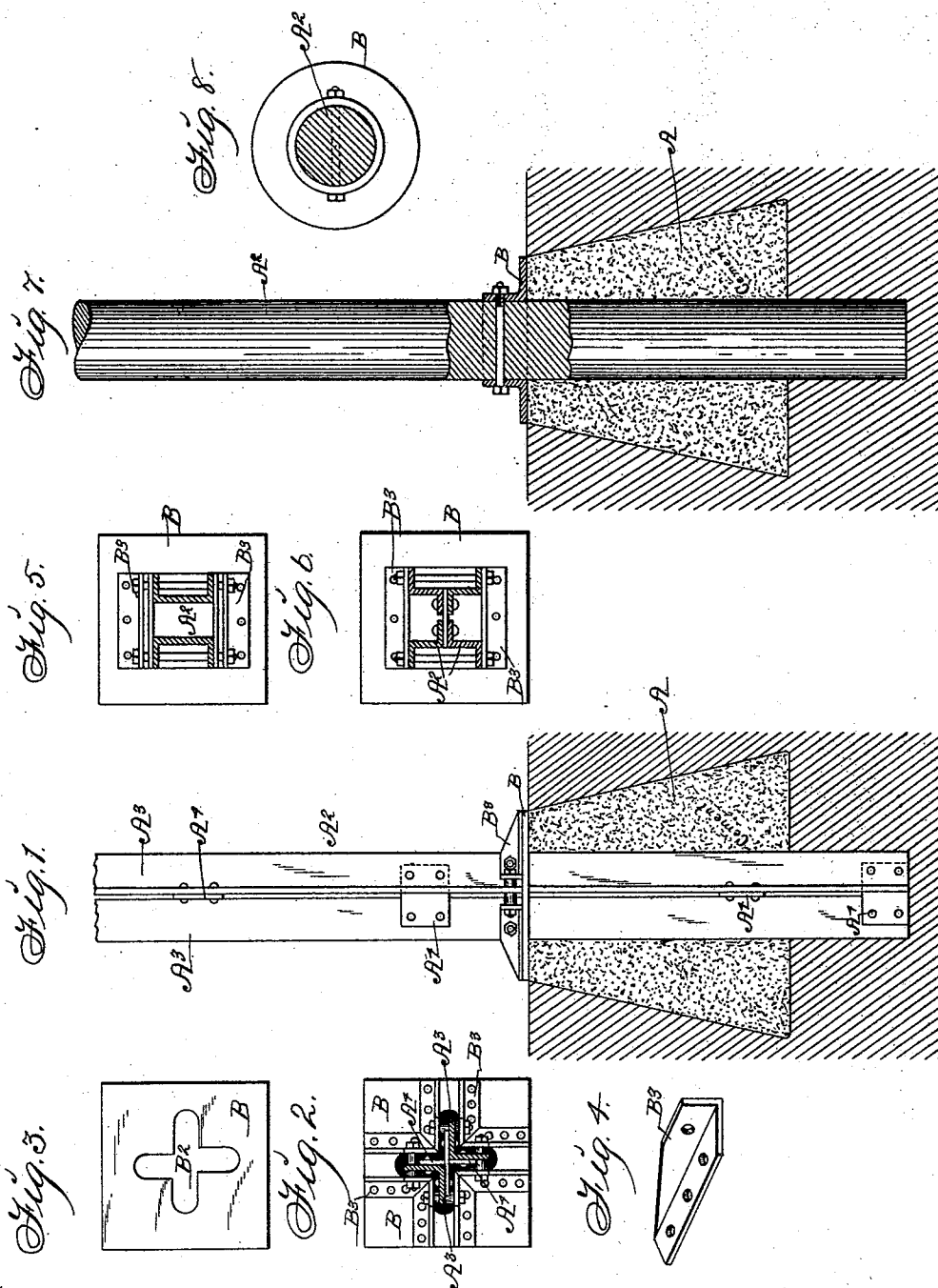


(No Model.)

J. B. MARSH.
BRIDGE POST.

No. 498,559.

Patented May 30, 1893.



Witnesses:
W. J. Samley.
J. Ralph Orwig.

Inventor: James B. Marsh,
By Thomas G. Orwig, Attorney.

UNITED STATES PATENT OFFICE.

JAMES B. MARSH, OF DES MOINES, IOWA.

BRIDGE-POST.

SPECIFICATION forming part of Letters Patent No. 498,559, dated May 30, 1893.

Application filed December 31, 1892. Serial No. 456,947. (No model.)

To all whom it may concern:

Be it known that I, JAMES B. MARSH, a citizen of the United States of America, residing at Des Moines, in the county of Polk and State of Iowa, have invented a new and useful Improvement in Bridges, of which the following is a specification.

My object is to facilitate setting bridge posts and adjustably and detachably connecting them with fixed piers, and my invention consists in the combination of a post, a plate adapted to engage a post and a base or pier having a bore adapted to admit the lower end of a post, as hereinafter set forth, pointed out in my claims and illustrated in the accompanying drawings in which—

Figure 1 is a side elevation of a bridge post extended through a base or pier, and secured thereon in a manner embodying my invention. Fig. 2 is a top or plan view of the same. Fig. 3 is a plan view of one of the base plates. Fig. 4 is an enlarged detail perspective view of one of the angle irons for securing the base plate to the bridge post. Figs. 5 and 6 are transverse sectional views of modified forms of bridge posts and base plates. Fig. 7 is a side elevation of a round bridge post connected with a fixed base or pier in a manner embodying my invention, parts being broken away to show their internal construction and Fig. 8 is a transverse sectional view of Fig. 7.

Referring to the accompanying drawings the reference letter A is used to designate a fixed base or pier preferably formed of cement, concrete or the like, and having a vertical opening extended through its central portion.

A² designates a bridge post which may be formed in any desirable ordinary manner, but preferably of two angle irons A³ connected by means of the straight flat clips A⁴.

B designates a flat metal base plate adapted to rest upon the base or pier A and is provided with a concentric opening B² adapted in size and shape to admit a bridge post; and B³ designates angle irons having beveled ends B⁴ adapted to secure the bridge posts A²

to the base plates B as clearly shown in the drawings.

It will be obvious that when uprights of different shapes from the one described are used, devices of different shapes and sizes will be required to connect the base plate with the bridge post, so that I do not desire to be understood as limiting myself to the particular construction of either of the said parts.

To detachably connect a bridge post with a fixed base I first place the base in position and form a vertical opening through its central portion, the base plate may then be secured on top of said base or pier, and the bridge post extended through both the base plate and preferably entirely through the base or pier, and when the top of the bridge post is at the proper elevation the angle irons B³ or their equivalents are secured to both the bridge posts and base plates preferably by means of rivets. By thus extending a bridge post through a base or pier of cement, concrete, or the like, it will be obvious that all lateral movement of the tops of the posts will be prevented and the base plates relieved of all lateral strain thereby permitting the use of base plates which are smaller and lighter than have been used heretofore. Another great advantage in the use of this method of connecting bridge posts and fixed bases or piers is that it renders unnecessary, bolting, or otherwise securing the base plate to the base or pier as has heretofore been found essential and the posts proper may be readily and quickly raised from the pier for purposes of repairs, &c., without removing any bolts or other anchoring device.

Having thus described my invention, what I claim as new therein, and desire to secure by Letters Patent of the United States, is—

1. In a bridge, the combination of a base or pier having a vertical bore to admit a post, a plate adapted to rest upon the top of the pier and provided with an opening coinciding with the bore in the pier and means for fastening the plate to a post, and a post extended downwardly through the coinciding

openings in the plate and the base or pier for the purposes stated.

2. In a bridge support the combination of the following elements, to wit: a base or pier
5 having an opening extended vertically there-through, a metal base plate placed upon said base or pier and having an opening therein, a bridge post extended through the base plate

and base or pier, and angle irons riveted to the said base plate and to the bridge post, substantially as and for the purposes stated. 10

JAMES B. MARSH.

Witnesses:

J. R. SHEELY,

THOMAS G. ORWIG.