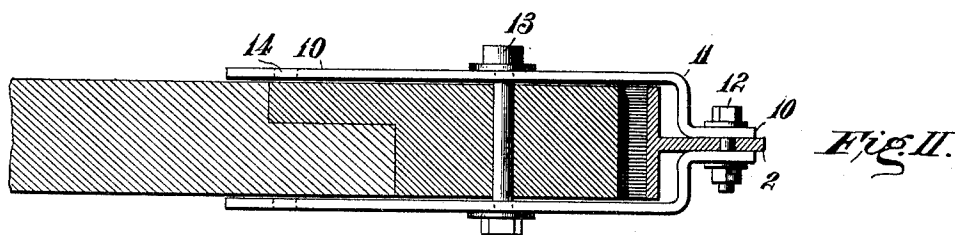
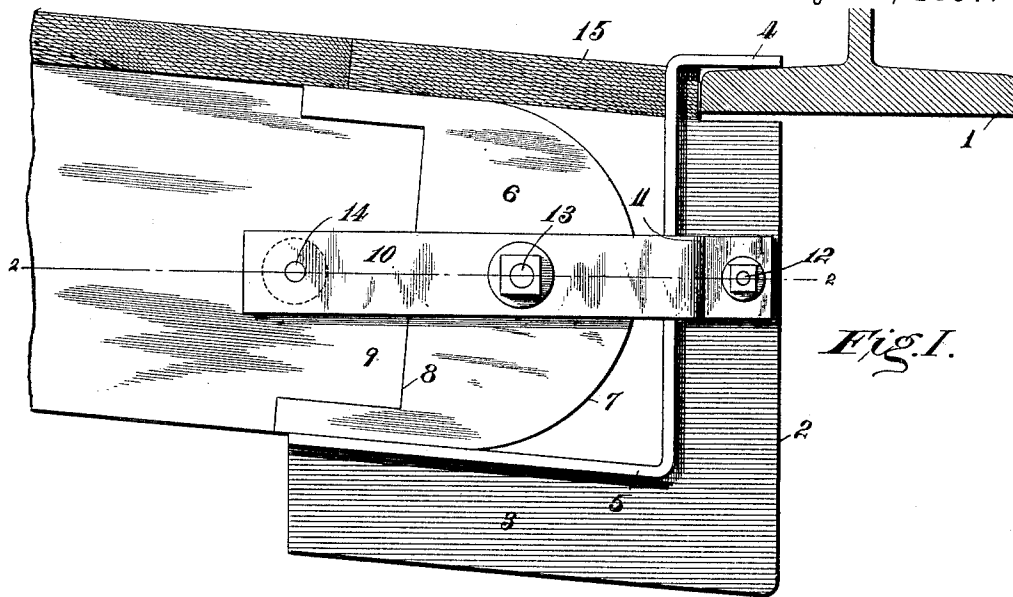


(No Model.)

G. A. SCHILLINGER.
ARCH CENTER.

No. 586,870.

Patented July 20, 1897.



Witnesses
Frederick Gulik
W. M. Ketch

Inventor
Gustav A. Schillinger
By *Joseph L. Hickman*
Attorney

UNITED STATES PATENT OFFICE.

GUSTAV A. SCHILLINGER, OF CHICAGO, ILLINOIS.

ARCH CENTER.

SPECIFICATION forming part of Letters Patent No. 586,870, dated July 20, 1897.

Application filed November 11, 1896. Serial No. 611,700. (No model.)

To all whom it may concern:

Be it known that I, GUSTAV A. SCHILLINGER, of Chicago, in the county of Cook, State of Illinois, have invented certain new and useful Improvements in Arch Centers, of which the following is a complete specification, reference being had to the accompanying drawings.

The object of this invention is to produce a strong, simple, durable, and easily-adjustable support to be used in constructing arches of cement, masonry, or other material. It is designed to be employed temporarily while the material of which the arch is composed is being set in position, and is adapted to be readily removed when the arch is completed.

In the accompanying drawings, Figure I is a side elevation of one end of an arch, of the section of a beam upon which it is to be supported, with my improved arch center in place. Fig. II is a section on the line 2 2 of Fig. I.

Referring to the figures on the drawings, 1 indicates, as an example of an arch-support, a section of girder-iron.

2 indicates the pendant member of a bracket, and 3 the supporting member thereof. The bracket is preferably made of T-iron, the pendant and supporting members being united at an angle to accommodate the desired range of arches. At its upper part it is provided with a jaw 4, which may be formed by cutting away the web of the bracket and bending the flange. As illustrated, the jaw is adapted to hang as from the flange of the girder 1 or other projection upon the permanent support for the arch.

Within the angle of the bracket and resting upon the comparatively broad base afforded by the flange 5 of the bracket I provide a socket-piece 6. It is provided with a curved rear end 7, which allows it to turn somewhat within the bracket for accommodating arches of different curvatures and is provided at its forward end with a socket 8, adapted to receive the tenoned end of the arch-supporting piece 9. The socket is preferably made of

steel plate, which may be struck into the proper shape by the use of suitable dies and machines.

The supporting-piece 9 may be made of timber or metal, as preferred.

Upon opposite sides of the pendant part 2 of the bracket I provide retaining-arms 10, bent, as indicated at 11, to conform to the width of the flange 5 and pivotally united to the web, as by a bolt 12. The ends of the arms beyond the bolt 12 and the bends 11 extend parallel to each other upon opposite sides of the socket 6 and are secured to it, as by a bolt 13, passing through suitable holes in the arms and in the socket, respectively. The arms are preferably provided with a plurality of bolt-holes 14, so that different adjustments of the socket to and from the bolt 11 may be obtained.

In the construction illustrated the bracket, socket, and retaining-arms constitute a complete support for the piece 9, which may be made in different lengths or in sections, so that when the brackets are adjusted in place and the supporting-piece fitted to the sockets the device is complete and ready for use.

It should be observed in this connection that the bracket affords the necessary support, while the socket and retaining-arms constitute means for confining the pieces 9 upon the support at the required distances apart and at the required elevation.

In practice a required number of brackets with supporting-pieces 9 are adjusted upon the supports 1 to sustain the sections of the arch to be constructed. They are afterward floored over by boards 15, which constitute a support for the material while it is being laid in the arch.

What I claim is—

1. The combination with a bracket, socket-piece and retaining-arms uniting the bracket to the socket-piece to constitute one member of an arch center, substantially as set forth.

2. The combination with a bracket made of T-iron, bent to form a pendant, and a supporting-piece, a jaw formed in the pendant-

piece, a socket, and means for uniting the socket to the bracket, substantially as set forth.

3. The combination with a bracket, retaining-arms provided with a plurality of holes, a socket supported in the bracket between the retaining-arms, and a bolt adapted to adjustably secure the socket within the bracket

to the retaining-arms, substantially as set forth. 10

In testimony of all which I have hereunto subscribed my name.

GUSTAV A. SCHILLINGER.

Witnesses:

F. A. ULRICH,
WM. A. BALL.