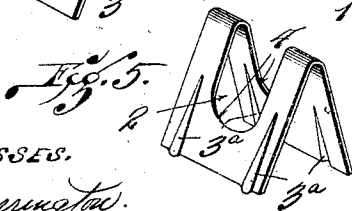
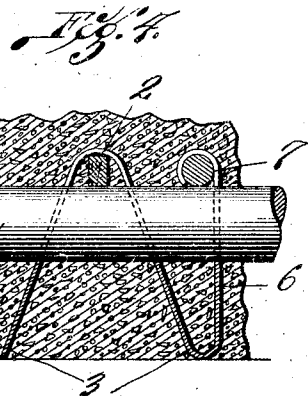
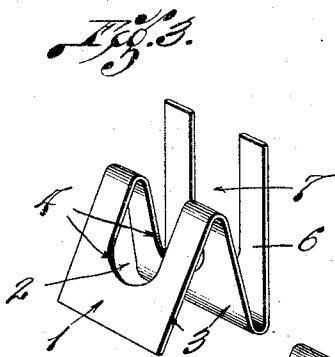
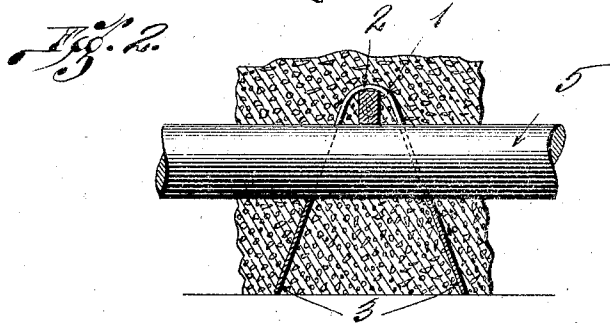
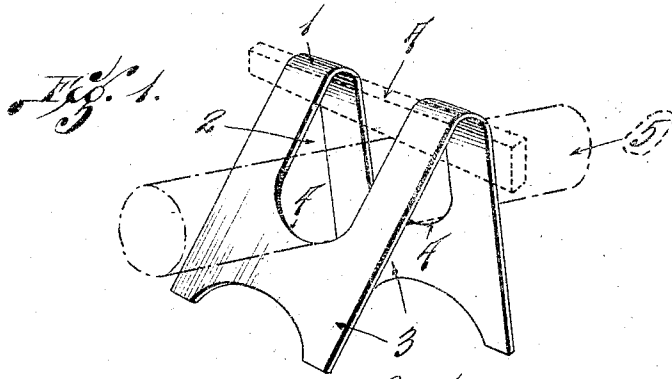


G. R. SCHOENTHALER.
 CHAIR FOR SUPPORTING REINFORCING BARS IN CONCRETE.
 APPLICATION FILED DEC. 15, 1910.

1,058,908.

Patented Apr. 15, 1913.



WITNESSES.

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UNITED STATES PATENT OFFICE.

GEORGE R. SCHOENTHALER, OF ST. LOUIS, MISSOURI.

CHAIR FOR SUPPORTING REINFORCING-BARS IN CONCRETE.

1,058,908.

Specification of Letters Patent.

Patented Apr. 15, 1913.

Application filed December 15, 1910. Serial No. 597,510.

To all whom it may concern:

Be it known that I, GEORGE R. SCHOENTHALER, a citizen of the United States, residing at St. Louis, Missouri, have invented a certain new and useful Improvement in Chairs for Supporting Reinforcing-Bars in Concrete, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a perspective view of one of my improved chairs for supporting the reinforcing bars of concrete construction. Fig. 2 is a sectional view of the chair embedded in a portion of concrete, and supporting a reinforcing bar. Fig. 3 is a perspective view of a modified form of my improved chair. Fig. 4 is a sectional view of the modified form of the chair embedded in a body of concrete, and supporting a pair of reinforcing rods. Fig. 5 is a perspective view of a modified form of the chair.

My invention relates generally to reinforced concrete construction and more particularly to a simple supporting chair for the metal rods utilized for reinforcing concrete floors or like structures, which are laid or arranged substantially in a horizontal plane.

In reinforced concrete floor construction it is desirable, and in some instances essential that the reinforcing rods be supported in a plane above the temporary flooring or form upon which the concrete is laid, and it is the object of my invention to provide a simple, strong and inexpensive one-piece supporting chair, which can readily be positioned on the temporary floor or form, and which will support the reinforcing rods while the plastic material is being poured or distributed upon the temporary flooring.

To the above purposes my invention consists in certain novel features of construction hereinafter more fully described and claimed.

As illustrated in Figs. 1 and 2 the preferred form of my improved supporting chair is formed of a single piece of sheet metal 1, rectangular in outline, and formed in the center thereof is a slot or elongated opening 2. The section of metal thus formed is bent transversely at its center into the form of an inverted V, thereby providing a

pair of legs 3, the lower ends of which rest upon the temporary flooring or form when the device is in use. The ends of the slot or opening 2 extend downward in the central portions of the legs 3, thereby forming a pair of U-shaped seats 4 for the metal reinforcing rods 5.

When the reinforcing rod is positioned on the supporting chair, the upper edges of the metal around the seats 4 at the ends of the slot or opening 2 tend to bite into the metal reinforcing rods thereby effectually holding said rods against longitudinal movement, while the concrete is being poured over and around said rods.

Where a series of reinforcing rods are arranged at right angles to one another, and it is desired to tie the upper series of rods, I make use of a chair of the form shown in Figs. 3 and 4. In this form of chair an upwardly projecting leg 6 is formed integral with one end of the section of material forming the chair proper, and the upper portion of this upstanding leg is slotted as designated by 7. When this type of chair is employed the upper ends of the portions of the legs 6 at the sides of the slot 7 are bent around the reinforcing rods 8, which are laid upon the main rods 5. (See Fig. 4).

As hereinbefore stated the edges of the metal around the seats 8 engage and hold the reinforcing rod 5, and tend to prevent longitudinal shifting movement of the same at the time the concrete is poured over and around the rods, and in a like manner the lower edges of the inclined legs 3 bite into and engage the false flooring or support which is usually of wood, thereby effectually anchoring the supporting chairs and tending to hold the same against accidental displacement.

The lower ends of the legs 3 of the chair may, if desired, be notched or cut away as shown in Fig. 1, and such construction permits the concrete to readily flow into the space between the lower portions of the legs.

In Fig. 5 I have shown a chair with its legs provided with reinforcing ribs 3^a stamped from the material of which the chair is formed, and such construction combines lightness in weight with strength.

In the drawings I have shown the reinforcing rods as being round in cross section, but it will be readily understood that my improved chair is adapted to receive and support all forms of reinforcing rods.

If desired keys A can be inserted between the upper portions of the chairs, and the reinforcing rods as shown in Figs. 1, 2 and 4, and by such arrangement the chairs and reinforcing rods are locked to one another.

Supporting chairs of my improved construction are simple, strong and durable, can be made in various sizes to accommodate reinforcing rods of different diameters, and said chairs can be very cheaply produced, inasmuch, as they can be readily stamped from large sheets of metal and bent into shape at the same time they are stamped out.

It will be readily understood that minor changes in the form, size and construction of my improved chairs for supporting reinforcing bars, may be made and substituted for those herein shown and described without departing from the spirit of my invention.

I claim:

1. The hereindescribed chair for supporting horizontally disposed reinforcing bars in concrete construction comprising a metal plate bent transversely at its center into inverted V-shape so as to form a pair of inclined legs, the lower ends of which are notched, which plate is provided with a cen-

trally disposed longitudinally extending opening, the end portions of which extend downward in the inclined legs to form a pair of seats for the reinforcing rod, the seats at the ends of the opening being provided with sharp edges which engage the surface of the reinforcing rod to hold the same against longitudinal movement before said rod and the supporting bar are embedded in the body of concrete.

2. The hereindescribed chair for supporting horizontally disposed reinforcing bars in concrete construction comprising a metal plate bent transversely at its center into inverted V-shape so as to form a pair of inclined legs, the lower ends of which are notched, which plate is provided with a centrally disposed longitudinally extending opening, the end portions of which extend downward in the inclined legs to form a pair of seats for the reinforcing rod.

In testimony whereof I hereunto affix my signature in the presence of two witnesses, this 21st day of November 1910.

GEORGE R. SCHOENTHALER.

Witnesses:

M. P. SMITH,
ALMA GEBHART.