

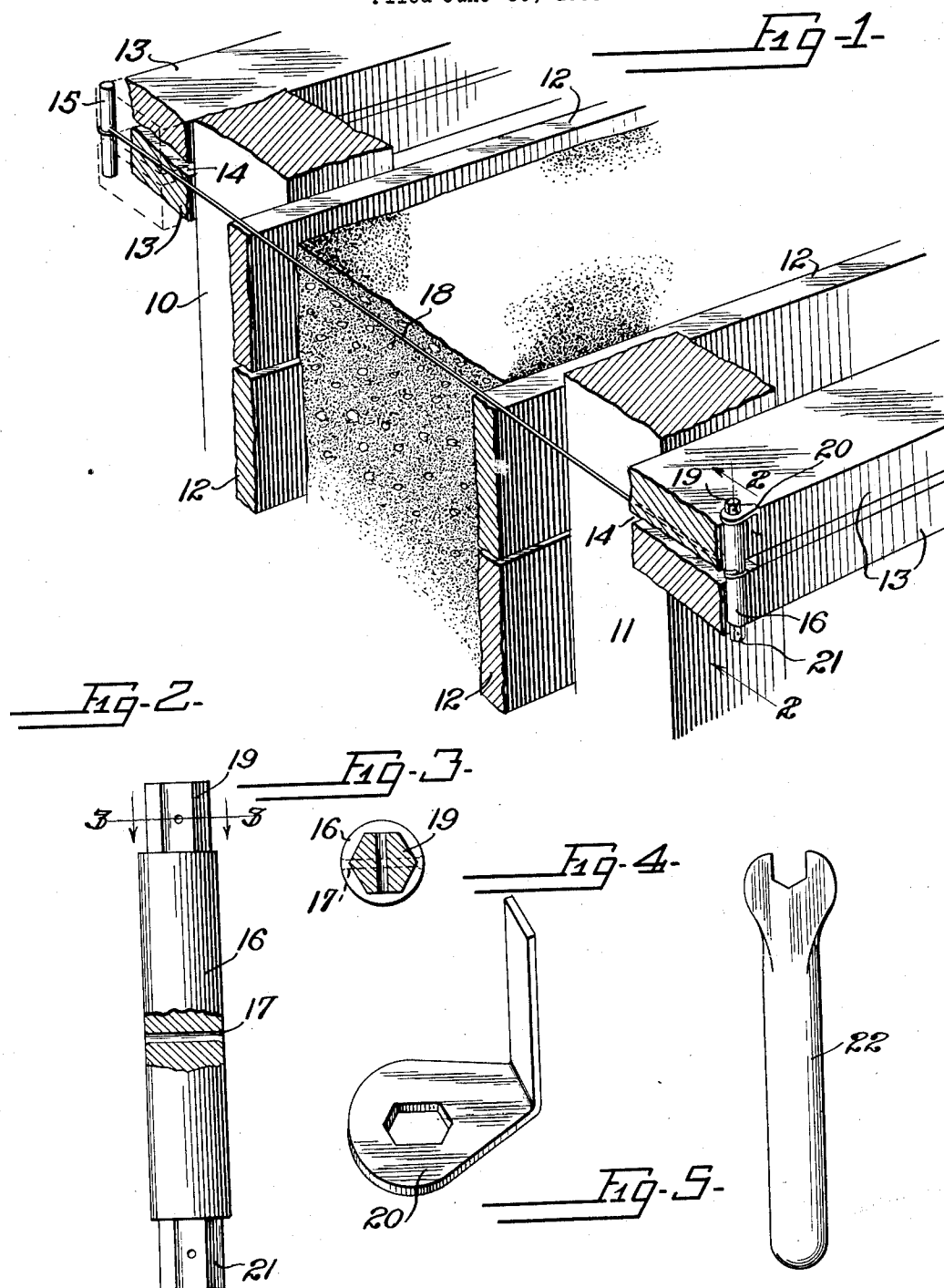
June 5, 1934.

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1,962,046

KNOCKDOWN FORM CLAMP

Filed June 30, 1933



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1,962,046

KNOCKDOWN FORM CLAMP

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Application June 30, 1933, Serial No. 678,533

1 Claim. (Cl. 254-161)

The invention relates to a clamp for concrete forms and more particularly to a knockdown form clamp.

The primary object of the invention is the provision of a clamp of this character wherein the form sheathing can be clamped in proper relation to the cementitious substance; as for example concrete, so as to hold the same for the setting thereof, the clamp being designed for use only where wire is employed for holding the forms in proper shape in the erection of concrete moldings.

Another object of the invention is the provision of the clamp of this character, wherein the wire or wires employed for holding the form is connected so that one end will be anchored and the other end wound on or unwound from a roller, the latter being operable by a wrench, and such roller can be locked in its adjusted position by a dog, thus maintaining the wire in a taut condition for the firm holding of the forms in proper condition and shape.

Another object of the invention is the provision of a clamp of this character, wherein a single wire is required for the holding of the forms in condition and shape for the building of concrete work, and as the ends of the wire will not protrude, it is not necessary to guard such ends as is commonly done in the erection of concrete forms. Time and labor are minimized and economy in material is assured, the form being readily knockdown when the concrete has become set, without the necessity of fracturing the wire or in any manner damaging the clamp.

A still further object of the invention is the provision of a clamp of this character wherein the construction and its application to a concrete form will eliminate the possibility of the dropping of such clamp from the form when the latter is erected for building work of concrete mass.

A still further object of the invention is the provision of a clamp of this character which is extremely simple in construction, thoroughly reliable and efficient in its purpose, readily and easily operated, as it may be applied and removed with dispatch, quickly adjustable, strong, durable, and inexpensive to manufacture.

With these and other objects in view the invention consists in the features of construction, combination and arrangement of parts, as will be hereinafter more fully described, illustrated in the accompanying drawing, and pointed out in the claim hereunto appended.

In the accompanying drawing:

Figure 1 is a perspective view showing the form

with the clamp constructed in accordance with the invention applied.

Figure 2 is an elevation of the adjusting roller, the same being partly in section and approximately on the line 2-2 of Figure 1.

Figure 3 is a section view on the line 3-3 of Figure 2 looking in the direction of the arrow.

Figure 4 is a perspective view of the dog.

Figure 5 is a plan view of the wrench.

Similar reference characters indicate corresponding parts throughout the several views in the drawing.

Referring to the drawing in detail, a form for a concrete wall is illustrated, comprising the vertical frame posts 10 and 11, respectively, the side boards or sheathing 12 and longitudinally disposed walings 13, there being a pair on each side of the frame and resting against the post next thereto at the outer side thereof. The walings 13 are suitably spaced apart to provide a clearance 14 therebetween. While the invention is shown as applied to a form for a wall, it is, of course, obvious that it may be applied for clamping or holding together any desired members.

The clamp constituting the present invention comprises a pair of roller-like members 15 and 16, respectively, each provided intermediate of its length with a transverse opening 17 for accommodating a wire 18, this being of the required length, and one of the ends of such wire is drawn and made secure about the roller 15 after passing through the opening 17 therein, this roller being an anchoring roller and it straddles the walings 13 of the pair at one side of the form. The wire 18 is also trained through the clearances 14 of the respective pairs of walings 13 and the other end of the wire is coiled or wound about the roller 16 which is the adjusting roller. This roller is vertically disposed to straddle the other pair of walings 13, both rollers being in perpendicular position. The roller 16 at opposite ends is reduced and flat faced for the locking engagement at one end 19 thereof of a disk 20, while the other end 21 will accommodate a wrench 22 so that the roller can be turned for the winding or unwinding of the wire 18 on and from the same. In other words this roller 16 functions as a windlass for the wire 18.

The dog 20 when engaged with the end 19 will abut one of the walings adjacent thereto of the pair 13 so as to hold the roller to sustain the wire 18 taut. This dog latches the roller against rotation in one direction which is that taken by the unwinding action of the wire 18 therefrom.

It should be apparent that by reason of the

perpendicular position of the rollers 15 and 16, and particularly the latter, the same can be readily manipulated for the clamping or holding of the forms in proper shape and condition in the construction of concrete work. Furthermore it should be noted that but a single wire is employed with the clamp. Also it will be apparent that the form can be conveniently knocked down after the setting of the concrete work without damage to the clamp, the latter being readily manipulated on the setting up of the form.

What is claimed is:

A clamp of the character described comprising a pair of rollers adapted to straddle pairs of walings outside of a knockdown concrete form, a wire made secure to one of the rollers and adapted to be wound on and from the other roller, the said other roller being formed with a transverse hole receiving the wire for the winding and unwinding thereof on and from the said other roller, an inverted L-shaped dog detachably secured to one end of the said other roller to abut one of the outside walings adjacent thereto to prevent the unwinding of the wire from said other roller, and a wrench engageable with the said other roller for the turning thereof prior to the engagement of the dog therewith.

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