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E. H. SAMUELSON.

ADJUSTABLE SCAFFOLD.

APPLICATION FILED APR. 1, 1907.

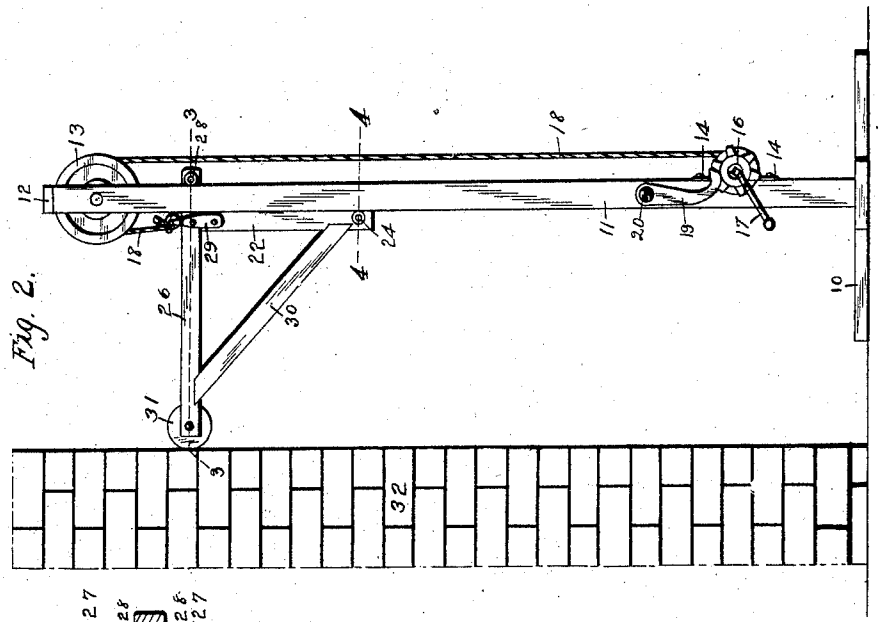

Fig. 2.

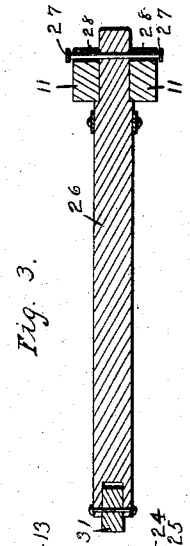

Fig. 3.

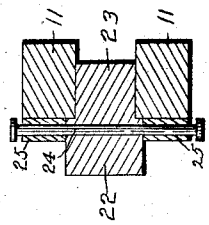

Fig. 4

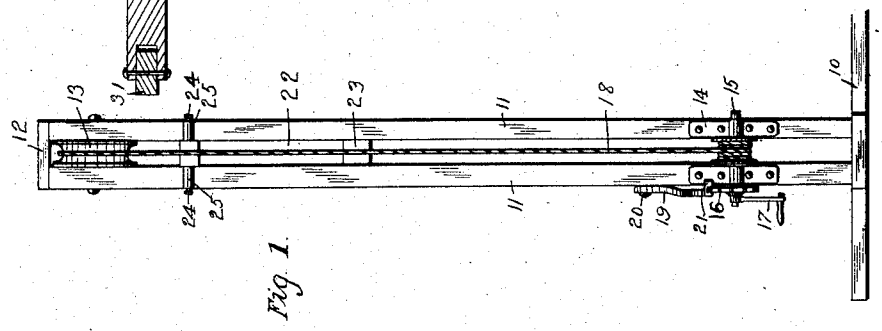

Fig. 1.

Witnesses.

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UNITED STATES PATENT OFFICE.

EDWARD H. SAMUELSON, OF BOONE, IOWA.

ADJUSTABLE SCAFFOLD.

No. 878,674. Specification of Letters Patent. Patented Feb. 11, 1908.

Application filed April 1, 1907. Serial No. 365,792.

To all whom it may concern:

Be it known that I, EDWARD H. SAMUELSON, a citizen of the United States, residing at Boone, in the county of Boone and State of Iowa, have invented a certain new and useful Adjustable Scaffold, of which the following is a specification.

The objects of my invention are to provide an improved scaffold of simple, strong and durable construction, especially designed for use in the construction of brick or stone walls, and capable of being raised or lowered with a minimum of applied power, so that two or more of the scaffolds may be provided for supporting a single platform, and the platform with a load of building material thereon may be readily and easily raised or lowered to the desired height for the convenience of the operators.

A further object is to provide an improved locking device for supporting the platform in its elevated position.

My invention consists in the construction, arrangement and combination of the various parts of the scaffold, whereby the objects contemplated are attained as hereinafter more fully set forth, pointed out in my claims, and illustrated in the accompanying drawings in which—

Figure 1 shows a front elevation of a complete scaffold embodying my invention. Fig. 2 shows a side elevation of same. This view shows a portion of a wall adjacent to the platform supporting bracket of the scaffold. Fig. 3 shows a detail sectional view on the line 3—3 of Fig. 2, and Fig. 4 shows a detail sectional view on the line 4—4 of Fig. 2.

Referring to the accompanying drawings, I have used the reference numeral 10 to indicate the scaffold base. Mounted upon base 10 are two uprights 11, spaced apart, and connected at their lower ends with the base, and at their upper ends by a cross piece 12. Mounted between the upper ends of the uprights 11 is a pulley 13 fixed to the front portions of the uprights 11. Near their lower ends, are two bearing plates 14, having a shaft 15 mounted therein. Between the uprights 11 is a drum 16 fixed to said shaft, and near one end of the shaft 15 is a toothed wheel 16. Adjacent to said toothed wheel 16 is a crank 17. A rope or cable 18 is fixed to and wound upon the drum 16, and extended over the pulley 13, and attached to the platform supporting bracket hereinafter described.

I have provided for locking the shaft 15 as follows: The numeral 19 indicates the body portion of a pawl or locking device pivotally connected by a screw or bolt 20 with the upright 11 above the toothed wheel 16. On the lower end of the part 19 is a lateral extension 21, designed to be engaged by the teeth of the wheel 16, and also designed to overlap and engage the adjacent plate 14 so that all of the strain upon the pawl is carried by this lateral extension, and there will be no strain upon the pawl tending to create a pressure upon the screw or bolt 20.

The platform supporting bracket comprises an upright 22 having at its lower end an outwardly extending block 23, to project between the uprights 11.

I limit the outward movement of the block 23 between the uprights, and at the same time minimize fricton by means of a bolt 24 passed through the lower portion of the upright 22, and provided with rollers 25 on its ends, to engage the inner face of the uprights 11. Fixed to the top of the upright 22 is a horizontal platform supporting member 26, the outer end of which projects between the uprights 11, and is provided at its outer end with a bolt 27, on which two rollers are mounted, to engage the outer faces of the uprights 11. A metal loop 29 is fixed to the upright 22 of the bracket, to provide for connecting the rope or cable 18 with the bracket. The inner end of the part 26 is supported by means of the brace 30, and mounted in the inner end of the part 26 is a roller 31, designed to engage and rest against a wall 32, to prevent the platform from tilting inwardly toward said wall, and at the same time to minimize friction.

In practical use, and assuming the scaffold to be in position shown in Fig. 2, and assuming that a platform is supported on the bracket, the roller 30 resting against the wall will prevent the scaffold from tilting in a direction toward the wall. Furthermore, the bracket is firmly and securely locked in its elevated position by means of the extension 21 on the pawl 19 engaging one of the teeth of the wheel 16, and also engaging one of the plates 14. If it is desired to lower the platform, the operator first moves the crank 17 in a direction tending to permit the pawl to swing clear of the toothed wheel. He then turns the crank 17 to permit the platform to descend. The friction will all be thrown upon the rollers 25, 28 and 31, and

when the platform has reached its lower limit, it will be supported by the upright 22 resting on the base 10. When it is desired to elevate the platform, the pawl is permitted to engage the toothed wheel, and the crank is turned in the proper direction. If at any time the operator should cease to apply power to the crank, the toothed wheel will engage the extension 21 of the pawl, and securely lock the wheel against such movement as would permit the platform to lower.

I have found that by the use of my improved scaffold a great saving in time and labor is effected by placing upon the platform a considerable quantity of material for building a wall, and then raising the platform with the material on it to the desired height, then after the material has been used, lowering the platform for a new load, thus combining the advantages of an adjustable scaffold and an elevator.

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

1. An improved scaffold comprising a base, two uprights spaced apart and fixed to the base, a pulley mounted between the uprights near the top thereof, a shaft, a drum on said shaft between the uprights, a toothed wheel on said shaft at the side of one of the uprights, a crank fixed to the shaft, a pawl to engage the toothed wheel, a bracket comprising a horizontal top piece, an upright and a brace, said top piece projected through between the uprights and having a bolt provided with rollers to engage the outer faces of said uprights, said upright pieces of the bracket having a block projected between the uprights, and a bolt provided with rollers to engage the inner faces of the uprights, said top pieces having a roller on its inner end and a rope or cable fixed to the bracket, passed over the pulley and fixed to the drum.

2. An improved scaffold comprising a base, two uprights spaced apart and fixed to the base, a pulley mounted between the uprights near the top thereof, two bearing plates fixed to the outer faces of the uprights near their lower ends, a shaft mounted therein, a drum on said shaft between the uprights, a toothed wheel on said shaft at the side of one of the uprights, a crank fixed to the shaft, a pawl pivoted to the side of one of the uprights, extended downwardly and then outwardly, and having a lateral extension thereon to engage the toothed wheel, and also one of said bearing plates, a bracket comprising a horizontal top piece, an upright and a brace, said top piece projected through between the uprights and having a bolt provided with rollers to engage the outer faces of said uprights, said upright pieces of the bracket having a block projected between the uprights, and a bolt provided with rollers to engage the inner faces of the uprights, said top piece having a roller on its inner end and a rope or cable fixed to the bracket, passed over the pulley and fixed to the drum.

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Witnesses:
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