

S. W. WARDWELL.

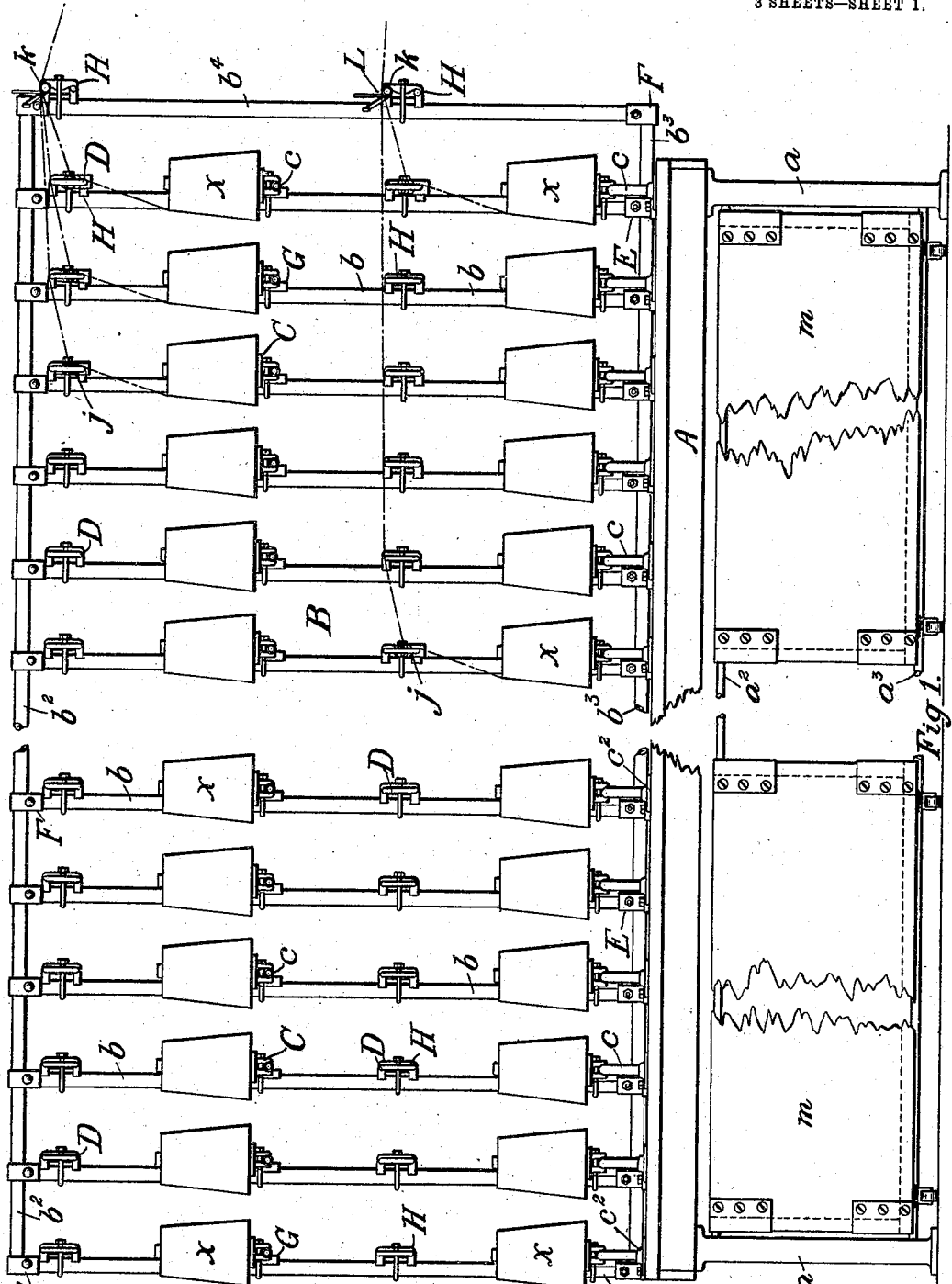
CREEL.

APPLICATION FILED JUNE 23, 1906.

932,522.

Patented Aug. 31, 1909.

3 SHEETS—SHEET 1.



WITNESSES

B. C. Rust.
M. H. H. H.

INVENTOR
Simon W. Wardwell
BY *John Freeman Wilson*
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3 SHEETS—SHEET 2.

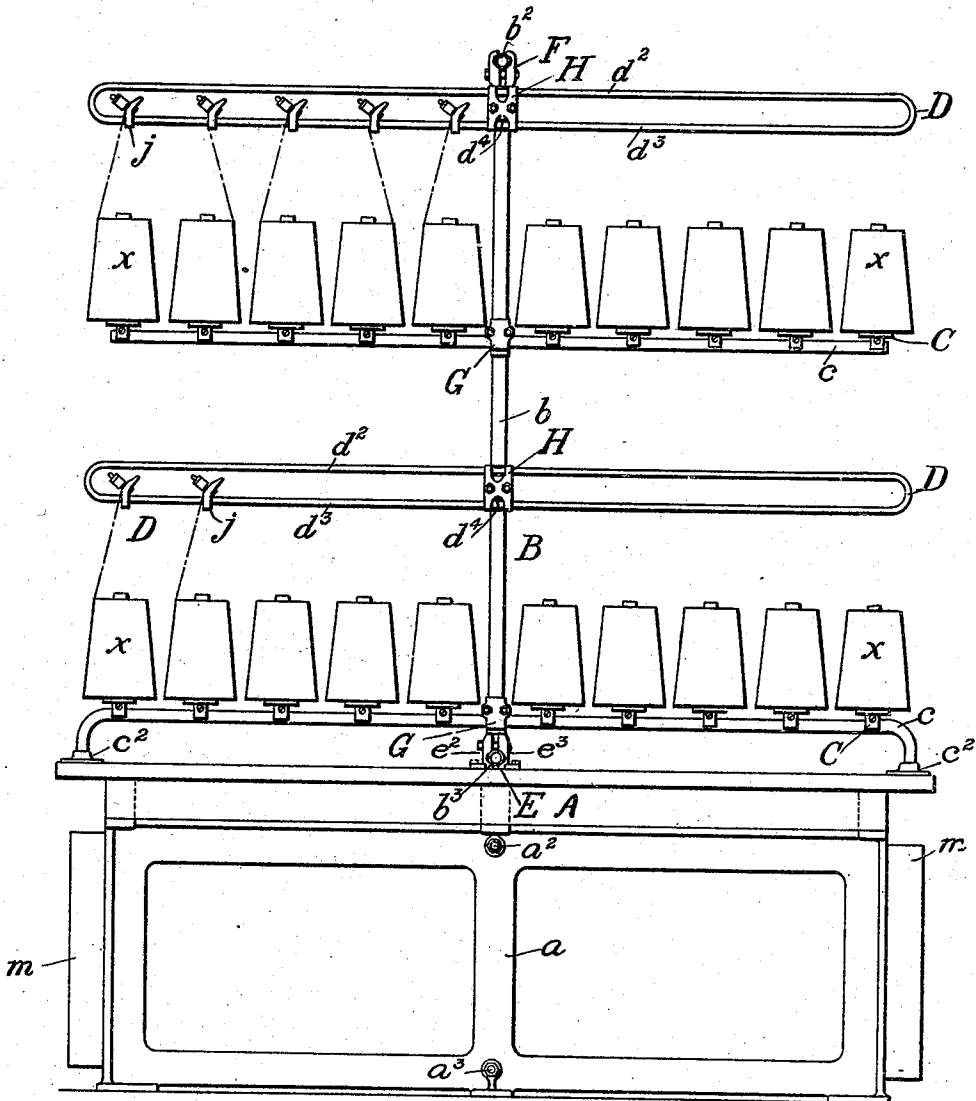


Fig. 2.

WITNESSES

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3 SHEETS—SHEET 3.

Fig. 3

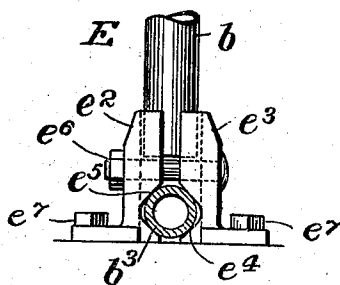


Fig. 4.

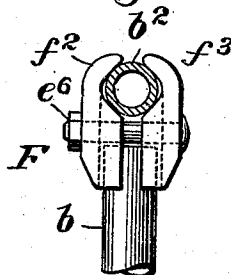
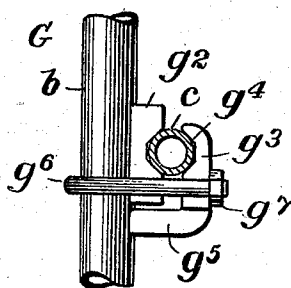


Fig. 5.



Witnesses
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S. W. Wardwell Inventor
By
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UNITED STATES PATENT OFFICE.

SIMON W. WARDWELL, OF PROVIDENCE, RHODE ISLAND.

CREEL.

932,522.

Specification of Letters Patent.

Patented Aug. 31, 1909.

Application filed June 23, 1905. Serial No. 266,654.

To all whom it may concern:

Be it known that I, SIMON W. WARDWELL, a citizen of the United States, residing at Providence, in the county of Providence and State of Rhode Island, have invented new and useful Improvements in Creels, of which the following is a specification.

My invention relates to supporting frames such as are used in creels, and consists in the construction and arrangement of the parts whereby the said frame may be properly supported and braced in its position upon a table or platform and the parts readily connected together.

In the accompanying drawing, Figure 1 is a side elevation of a creel broken away at the center and illustrating my invention; Fig. 2 is a front elevation; Figs. 3, 4 and 5 are detached detail views illustrating the means for connecting the vertical and horizontal portions of the frame together.

The framework B is mounted upon any suitable supporting base, as a platform or table A. The table A is supported by the legs *a a*, etc., the two end ones only being shown in Fig. 1, but a sufficient number are used between the ends to make a rigid support for the table, and the legs are preferably tied together by the rods *a²* and *a³*.

The framework B is preferably constructed of gas-pipe or tubing, to render it light and strong, or it might be made of rods, and comprises a row of masts or uprights *b, b, b*, etc. tied together at the top and bottom by the horizontal rods or pipes *b²* and *b³*. Fastened to the uprights are the crosstrees *c c*, etc., and D D, etc., extending the width of the table, see Fig. 2, for supporting the supply cops and tension devices, and arranged one row above the other, the lower ones being bent down at the ends and fastened to the top of the table by the flanges *c² c²*, etc. Arranged above the cop supports are the tension supports D D, etc., which I have preferred to show as rods, each bent to form two parallel extensions *d²* and *d³*. As shown in Fig. 2, each pipe *c* is adapted to support ten cone-holders C C, etc., arranged with five on each side of the upright, and the creel is designed for ordinary use to consist of twenty-five uprights, each supporting twenty supply cops in two tiers, making a total of five hundred cops, although this number may be varied to suit requirements by shortening or lengthening

the table and decreasing or increasing the number of supports.

It will be seen that the horizontal members or rods *b²*, *b³* extend across the ends of the vertical members or rods *b*, and in order to connect the vertical and horizontal members thus arranged, without the necessity of using the usual screw-socket connections, I make use of the clamping devices E, F, each of which consists of two jaws, each pair of jaws *f²*, *f³*, at one end having recesses adapted to receive between them the horizontal rods, and having sockets or recesses at the opposite ends adapted to receive the ends of the vertical rods, and the clamps E, which are at the lower ends of the rods *b*, have also lateral flanges with slots for the reception of bolts *e¹*, by means of which the jaws of the clamps may be bolted to the table. Each pair of jaws is caused to clamp both the horizontal and the vertical rods by a simple transverse screw-bolt *e⁶*.

In Fig. 5 is shown a clamp G for fastening the crosstree pipes *c c* to the uprights *b b*, etc. The member *g²* is grooved to form a bearing on the pipe *b* and has a jaw partly surrounding the pipe *c*. The second member *g³* is formed with a similar jaw *g⁴* and a tail piece *g⁵* which is slotted to present a bearing on the pipe *b*. A U-shaped wire or staple *g⁶* is adapted to surround the pipe *b*, with its ends projecting through grooves in the member *g³*, and is threaded at the ends to receive the nuts *g¹*, *g¹*. By tightening the nuts against the face of the member *g³* the latter is brought up with its jaw, pinching on the pipe *c*, and the tail piece binding on the pipe *b*, and the pressure of the pipe *c* against the member *g²* binds the latter to the pipe *b* so that the two pipes are held firmly together. Ordinarily in frames of this character the vertical and horizontal members are connected by T-shaped threaded socket pieces which is not only expensive but necessitates making the horizontal rods in sections threaded to connect with said socket pieces, and this construction necessitates connecting the members in succession in building up the frame in a manner that requires much time and labor, and all of which is avoided by the use of the clamps with separable jaws adapted to both vertical and horizontal members, as above set forth.

I claim as my invention:—

1. A creel comprising a supported base or

table A and a framework B supported by the table, composed of a series of vertical rods or pipes b arranged centrally along the table, tie-rods b^2 and b^3 for securing the pipes b together, a series of crosstrees c , etc., composed of rods or pipes fastened to the pipes b and arranged in tiers, those of the lower tier having their ends bent down and fastened to the table, cup-holders C fastened to the crosstrees c , a second series of crosstrees D D, etc., composed of rods formed in two parallel sections d^2 and d^3 , and tension devices j supported on the rods.

2. The combination in a creel with a supporting base, of a framework comprising vertical rods, cross-rods, and tie-rods and braced by crosstrees c parallel to the base and bent down at the ends and connected to the base.

3. The combination in a creel with a supporting base and a series of vertical rods, of horizontal rods extending across the ends of the vertical rods, and clamping devices, each consisting of two jaws recessed to receive

the horizontal rods between them at one end and one of the vertical rods between them at the other end, and a bolt for drawing the jaws together to clamp both rods.

4. The combination in a creel with a supporting base, of vertical rods, horizontal rods extending across the upper and lower ends of the vertical rods, clamps each consisting of a pair of jaws recessed to receive between them the upper horizontal rod and the upper end of one of the vertical rods, and pairs of clamps each consisting of two jaws recessed to receive between them the lower end of one of the vertical rods and the lower horizontal rod and provided with flanges for clamping to the base.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

SIMON W. WARDWELL.

Witnesses:

THOMAS M. CHILD,
HENRY J. GOBEILLE.