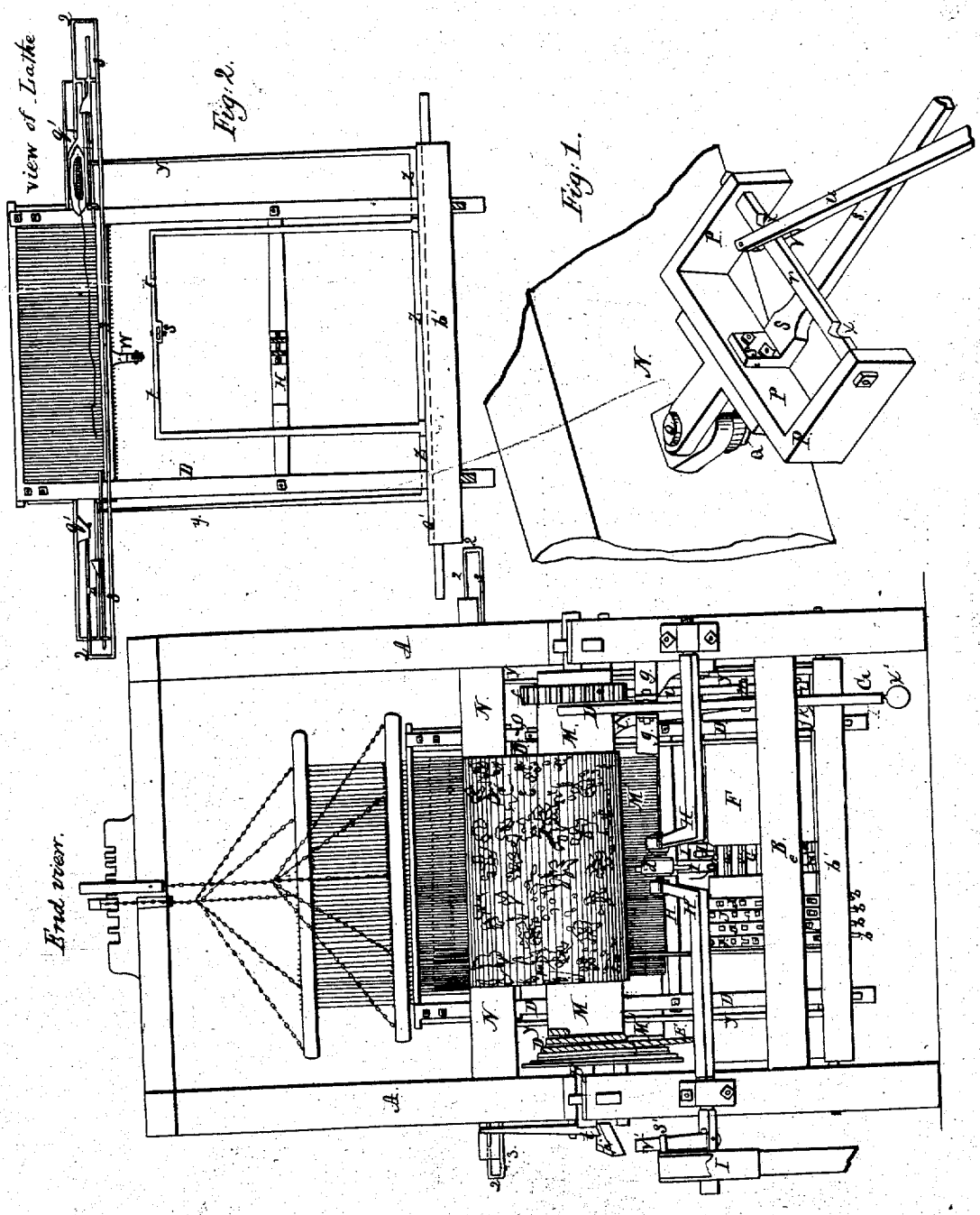
139. TEXTILES, WEAVING.
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Draftsman

Sheet 1-3 Sheets.

J. Thorp.

No. 1693 X Loom.

Patented Mar. 28, 1812.



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RAFTSMAN.

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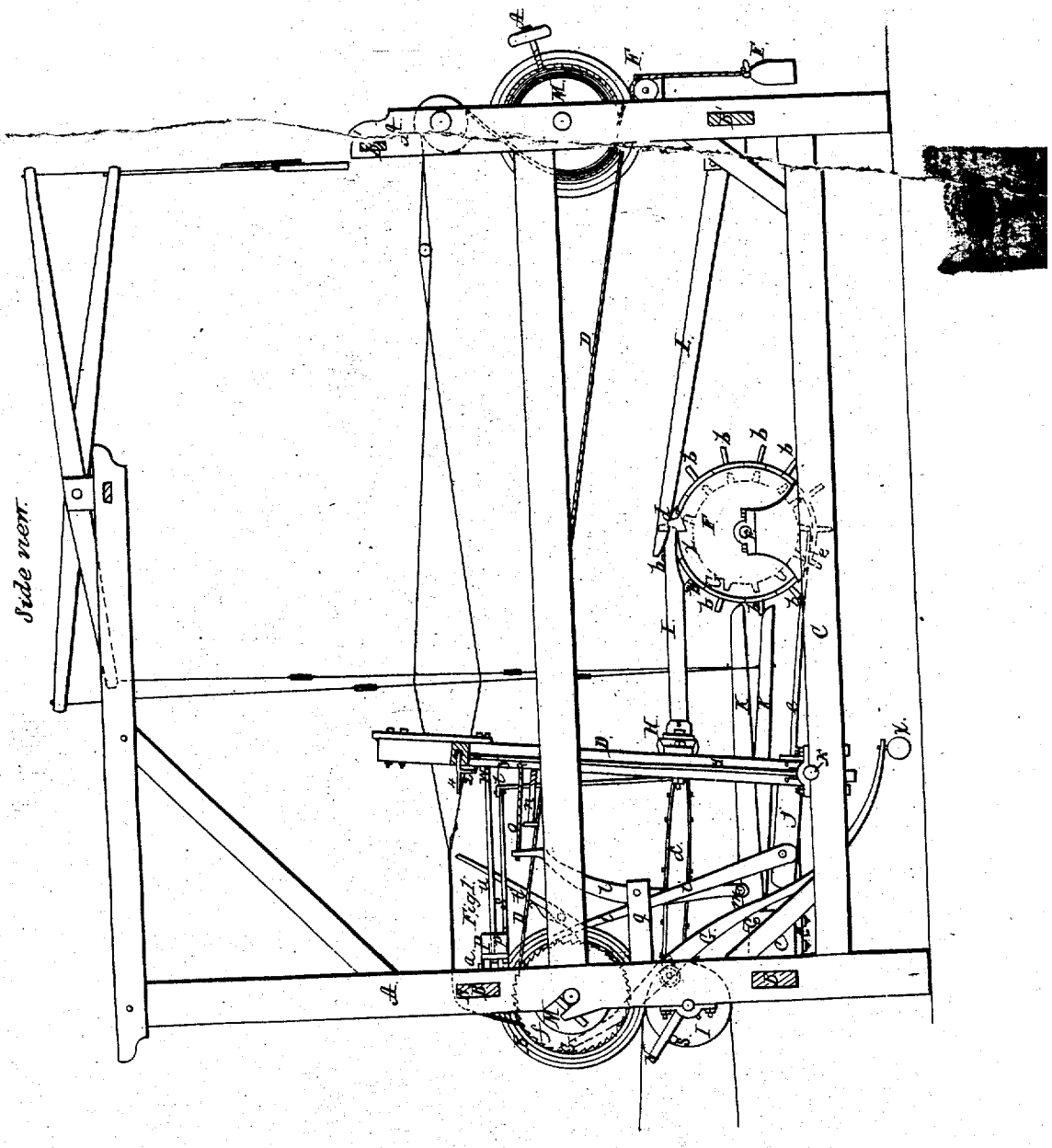
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No. 1693 X

J. Thorn.

Loom.

Patented Mar. 28, 1812.



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139. TEXTILES, WEAVING.
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ARTISMAN.

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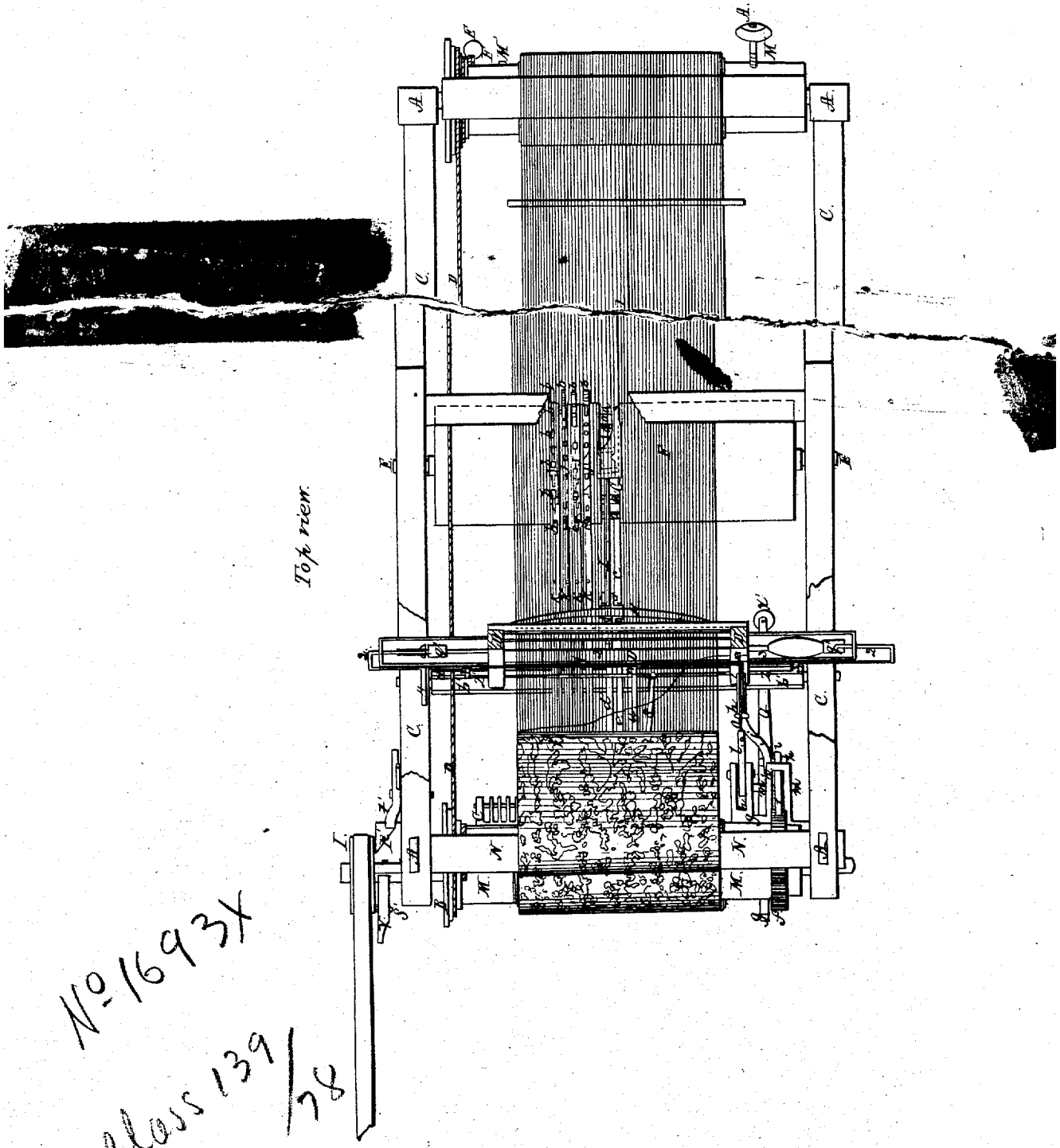
J. Thorp.

Sheet 3-3 Sheets.

Loom.

No. 1,693 X.

Patented Mar. 28, 1812.



To face view.

No. 1693X
Class 139
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1693X

John Sharp — Letters Patent Dated March 28th 1812.

The Schedule referred to in these Letters Patent and making part of the same containing a description in the words of the said John Sharp himself of his Improved Hand and Water Loom —

This Machine consists of four upright posts two front and two back girts and two girts on each side connected said posts as in other looms.

The Lathe is a frame whose construction is some what like unto the lathe of a common fly shuttle loom, it is turned or hung upon pivots or gudgeons which are situated in the bottom side girts of the frame under the webb so that the slay at the top will nearly coincide with the under side of the webb when sprung. The bottom side girts of the frame elevate the ends of a shaft or axle wheel which I shall call the headdle wheel, the said wheel has in it a score or a channel in which pins or coggs are fixed. There is a flat and slender piece that extends from one side piece of the lathe to the other in which one end of a hook is confined that operates the headdle wheel on the circumference of said wheel chains are placed for the purpose of shifting the headdle the said chains are drawn whose length may be increased or decreased at pleasure to spring the webb a greater or less distance, and can be so shifted upon the wheel that various figures may be woven, or almost any number of headdles operated. The headdles are hung on a bar which is confined to the lower front girt of the frame, with their pecils extending to the wheel. The above mentioned hook catches upon the pins or coggs which are fixed in the wheel and according in number as of the chains, there is another hook or catch that prevents the reaction of the wheel while the web is sprung, one end of which is confined to the back girt of the frame the other end has in it a notch and extends to the pins or coggs in the wheel, and is liberated by the first named hook as it passes back to gain another hold. There is another arm or prop which extends from the lower front girt of the frame and under the

handle to the pins or tags in the wheel to prevent the reaction of it. The cloth beame is hung in the two front posts of the frame a little below the breast beame, and has upon one end of it a ratchet. There is a block which extends from the front post directly under the ratchet, in whose outer end is two mortices, through one of which passes a lever or pedal, whose upper end extends to the teeth of the ratchet, and its lower end hung by a pivot in a piece that projects from the side piece of the Lathe, and nearly on a level with the pivot on which the lathe swings and a proper distance from it to give a motion sufficient to take up the cloth. There is in the other mortice a lever which I shall call a regulating lever hung on its middle for the purpose of regulating the taking up of the cloth, the pawl being fixed to take up the cloth too fast is liberated by a pin in the lower arm of the lever in consequence of its upper arm being moved by a screw in the side piece of the Lathe whose the cloth is beat beyond its limited position the upper arm of this lever is made fast to the Lathe by a string by which it is returned to the lathe swings back and letting the pawl fall on the ratchet after it has been liberated.

That which throws the shuttle I shall call the shuttle driver it is affixed under the cloth in or near the middle of the breast beame hanging or turning upon the pivot or gudgeons and is constructed with a plate of metal in whose middle is a slit or mortice extending from one end post its pivot or gudgeons and is constructed with a plate of metal in whose middle is a slit or a mortice extending from one end post its pivot or gudgeons to the other, or the rod bent in which a rod or staple is confined. There is confined to the said plate one end of an arm, the other end of which extends under the bottom of the lathe to its centre of motion and is there fastened to the shuttle drivers, or rod on which they are confined. There is another rod or piece of metal which I shall call the slider at one end of which is a mortice or hook extended to slide or turn on the aforesaid rod or staple, at or near each end of the said rod or staple is a notch on which the slider extends to throw the shuttle, the other end of the said slider is confined to a piece under the

bottom of the Lathe. The said peices to which the said Slider is confined is plained and clarke & made to render the first impulse and to recoil on the shuttle. The construction of the shuttle shewn are Cards whose upper surface just clear the under side of the shuttle the said shewn are connected by a rod which slides in a channell that is cut in the bottom of the Lathe.

There is inserted into the cylinder or cylinders that corresponds the barrels one or more arms, the said arms are screws on which are cuts are made to assist in springing the cloth, for to drive the cloth and from that round end of the cloth beam the _ is a line that passes round one end of the yarn Beam, which has upon it a long shuer, where arms or channells begin at the bigness of the beam and increase in circumferance until they arrive at the bigness of the intended rolle of cloth, the lower part of the said line sustains a weight which hangs upon a pulley sufficient to shrink the webb, the said line is shifted from one of the said channels to another as the cloth fills up the beam.

To support against the blow of the Lathe there is a lever which I shall call the Lathion Lever, hung by a pivot to the side gate of the frame whose Lathion peices against the yarn Beam. The other arm of which sustains a weight and extends beyond the pivot of the Lathe and thereby renders the peice in which the Leather is hung the said peice is long for the purpose of pressing down the long arm of the Lever causing a greater friction upon the Beam when the Lathe beats the cloth beyond its limited position which is impelled by a Lever the Lathe is vibrated by a crank which is situated in the two front posts of the frame and is connected to the peice in which the said shank is confined that sparks the middle wheel there is a pulley which plays loosely upon one end of the shaft of said crank and has in one side of it a pin or Cogg which takes the end of an arm or Lever which is confined to the shaft of said crank by a Pivot. There is to the front post in range of the said pin of the arm a cleat hung by its middle for the purpose of stopping the Lever the lower arm of the said mentioned Lever hard upon it

a three square piece of wire and bent the bend of which is sufficient when ever it is moved to the point of the arm to cast it off the pin or cogs and stop the loom. There is in each shuttle box a knee for the purpose of stopping the loom whenever the shuttle lodges in the web or misses the box one arm of each knee extends into the shuttle boxes and is nearly parallel with them.

There is in each shuttle box a knee for the purpose of stopping the loom when ever the shuttle lodges in the web or misses the box one arm of each knee extends into the shuttle boxes, and is nearly parallel with them —

The other arm of the said knees are connected by a rod, so that when one is moved by the shuttle the other will have the same operation.

The arm of one of the said knees is kept in range of the upper arm of the lever which stops the loom by a light spring and would immediately strike and move it, which would liberate the arm from the pin or cogs, if it was not moved in consequence of the shuttle striking the other arm of them, as it passes into the boxes. The friction of the said knees against the shuttle also prevents its rebounding.

Witnesses
S. Dana Jun^r
Christopher Burr

John Thorpe

(Drawing Made — N.H.S. 1846)

Ent.
1796.

(Recorded in Book 28 Jan^y 28th 1847) (1332 words)