

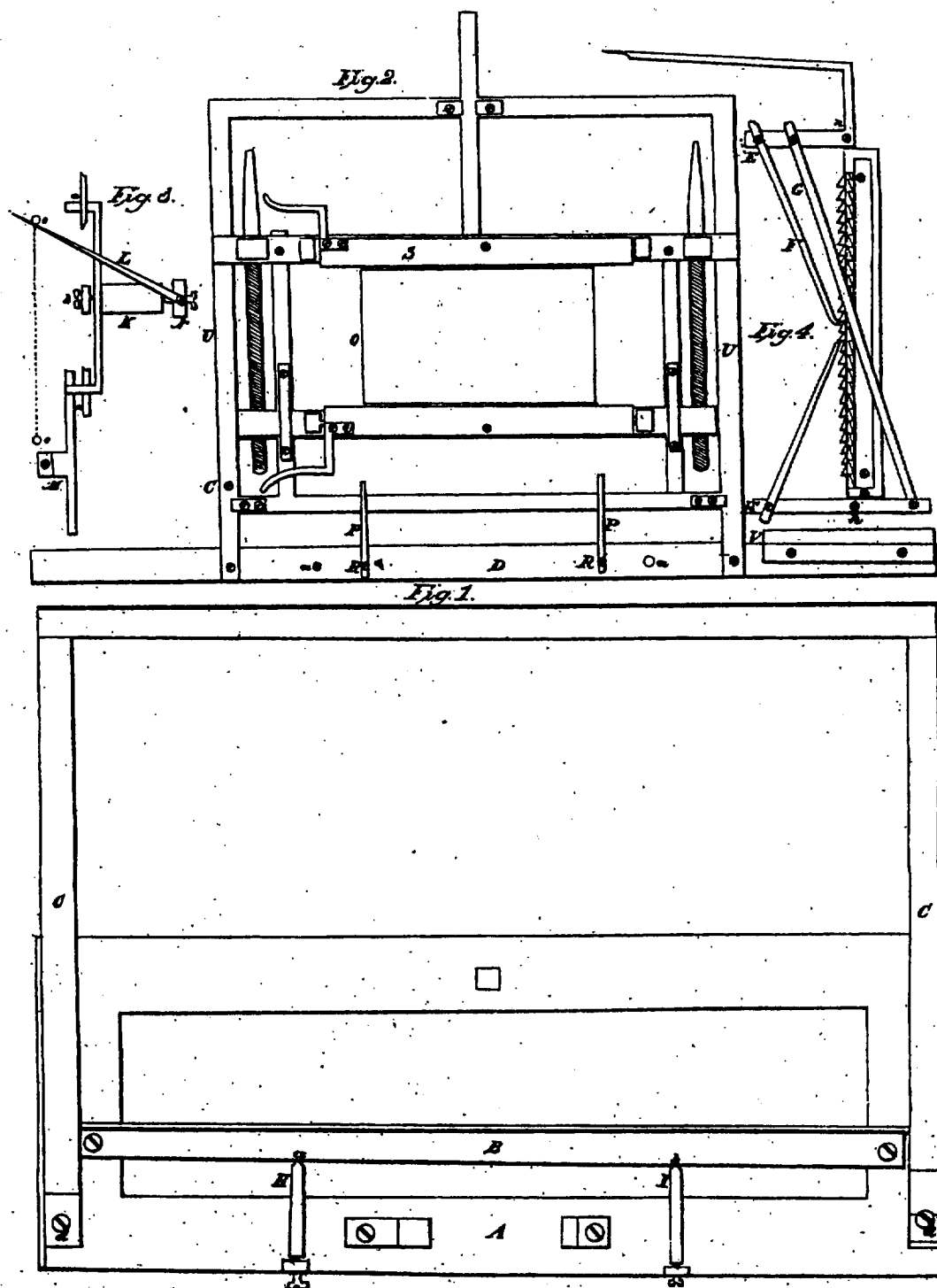
170X

2 Sheets—Sheet 1.

A. WHITTEMORE.

Machine for Manufacturing Sheet Cards.

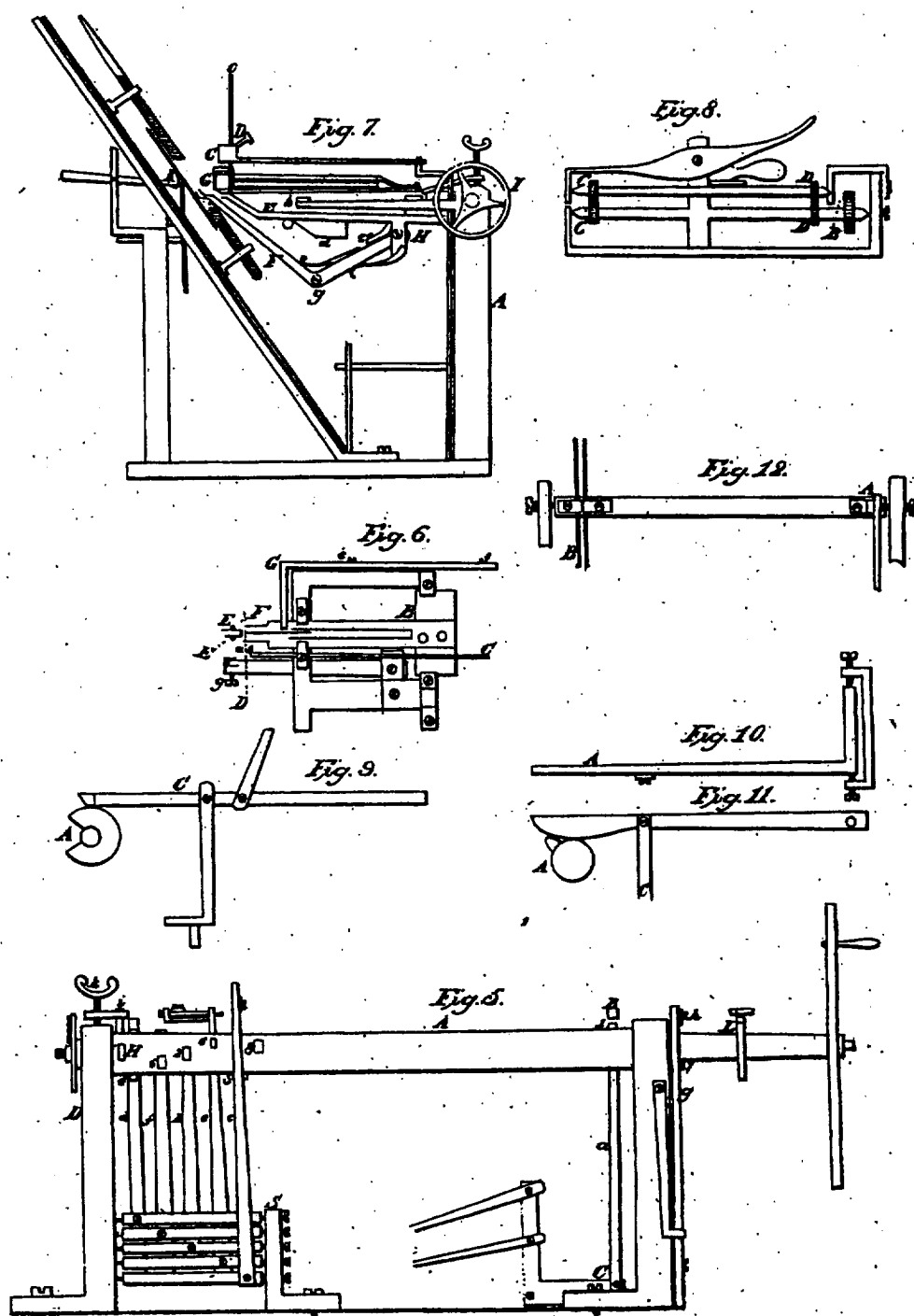
Patented June 5, 1797.



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The Schedule referred to in these Letters Patent and making part of the same, containing a description in the words of the said James Watt himself, of an improvement in manufacturing cards.

A general specification of a machine for manufacturing, sheet-cards, suitable for wood or cotton cards, hollow cards, clothed cards, &c. cards of every kind, size & denomination. This machine is put in motion by a cylinder, on which are a number of knobs to give the different motions. This cylinder may be turned by hand or other power. On one end of the cylinder is a balance wheel with two or more arms in one of the arms is a handle to turn it, on the other end is a section wheel which plays into a pinion which turns two rollers which roll the wire into the former the proper length immediately after a corner (so called) is let off by a knob on the cylinder and forced up by a spring against the shoe, so rolled into the former, and holds it against the head, while the shoe forced up by another knob, cuts the wire off. A prick is forced up by another knob, & pricks two holes in the leather and takes back while the wings forced up by another knob, form the wire into a staple. Around the head a conductor is let off by a space in the cylinder and is forced up by a spring to its proper place to conduct the wire or staple into the leather which is held in the carriage and extended by screws so as to be tight. Immediately the whole apparatus for forming the wire is forced forward and places the wire or staple into the leather and holds it until the crooker which is on the other side of the leather, and moved by another knob, forces the points of the wire or staple down over a stationary piece placed the same side of the leather with the crooker, which completes the wire immediately the head is lifted up by another knob, the corner advances further forward and sets the wire straight to the leather, then the apparatus which forms the wire, and corner, falls back to their place and receive another wire while the wire is rolling into the former, the carriage is moved by a wheel taking one tooth into toothed rack, which it is moved by another knob.

then knob on the cylinder, and moves the carriage and leather to re-
 ceive another wire or staple, it continues on until it goes meeting
 the card or sheet lengthwise. The instant this dog is raised and
 held up by a piece which is governed by a spring, and a straight
 piece which gives the length of the card or sheet, another dog at the
 opposite end of the machine falls into another toothed rack, & moves
 the carriage and sheet back in the same manner it was carried
 forward; this dog is moved by the same knob which moves the first
 mentioned dog, by being connected with it, at the same time there's
 dogs shift; another dog which is moved by a small wheel on the
 end of the cylinder, being connected with a piece, which falls into
 a blank or space in the small wheel, by which means the dog takes
 one tooth in a rag wheel, which is placed on an arbour above the
 small wheel; two which arbour are two small wheels, on which wire
 two chains or straps, which are confined to the carriage or piece which
 the carriage slides on; the piece connected with the dog, rises im-
 mediately at the small wheel on the first mentioned arbour, turns
 round, and forces the dog, to move the rag wheel, and winds the chain
 or strap; which raises the carriage and leather sufficiently for an-
 other row of wires to be let; it holds the rag wheel in the same place un-
 til the row of wires is full; this piece which is connected with the
 dog which moved the rag wheel is also connected with another piece un-
 der it which rests and slides on a straight piece, the same length
 of the straight piece that gives the length of the card or sheet, and
 governs the other two dogs; this piece is connected with the dog
 slides on the straight piece as the carriage is moved on end (the straight
 piece being confined to the carriage) until it slips off the end of the
 straight piece, and lets the piece above connected with it and the
 dog fall into the blank or space in the small wheel on the first men-
 tioned cylinder, to let the dog take one tooth in the rag wheel, and wind
 again by the small wheel revolving around it, attached on the straight
 piece, and held up until the row of wires is full and then slips off
 the other end, continues to operate in the same manner until it

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17/2 continued

card or sheet is complete, or has the complement of wire let in;
two or more cards or sheets may be set at the same time in the
saw machine by the addition of a former to each sheet or card.

Witnesses present at signing,
Nathl. Abraham
Thomas Edwards

Attest
James Whitman

8.30 hours. E

Chas. H. H.

(Drawing)

(Rec'd & Recorded Aug 5th Jan. 1852)