Sheet 1. 3 Sheets.

S. W. Brown.
Picker.

No. 11,826. Patented Oct. 24, 1854.

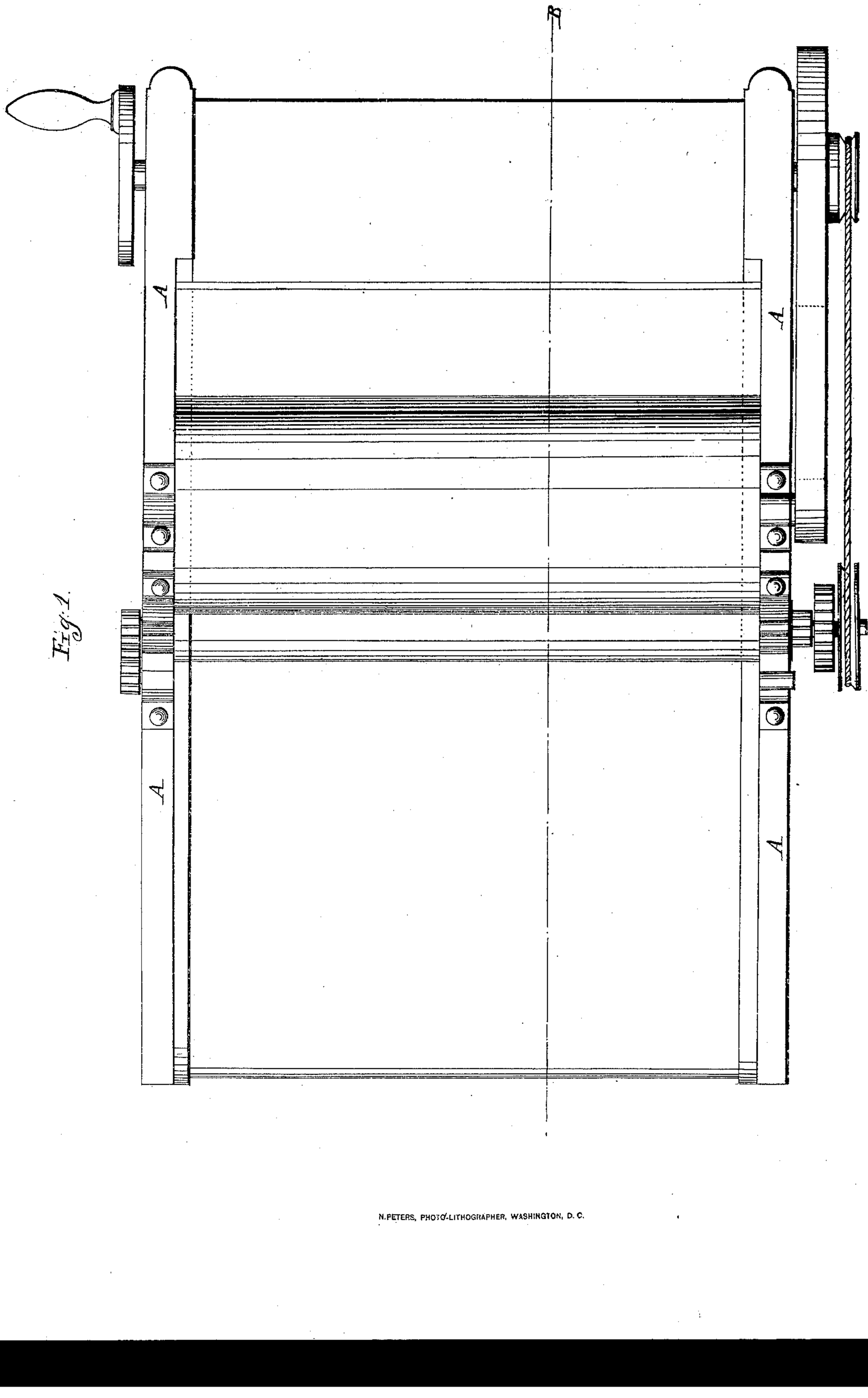

Fig. 1.

Sheet 2. 3 Sheets

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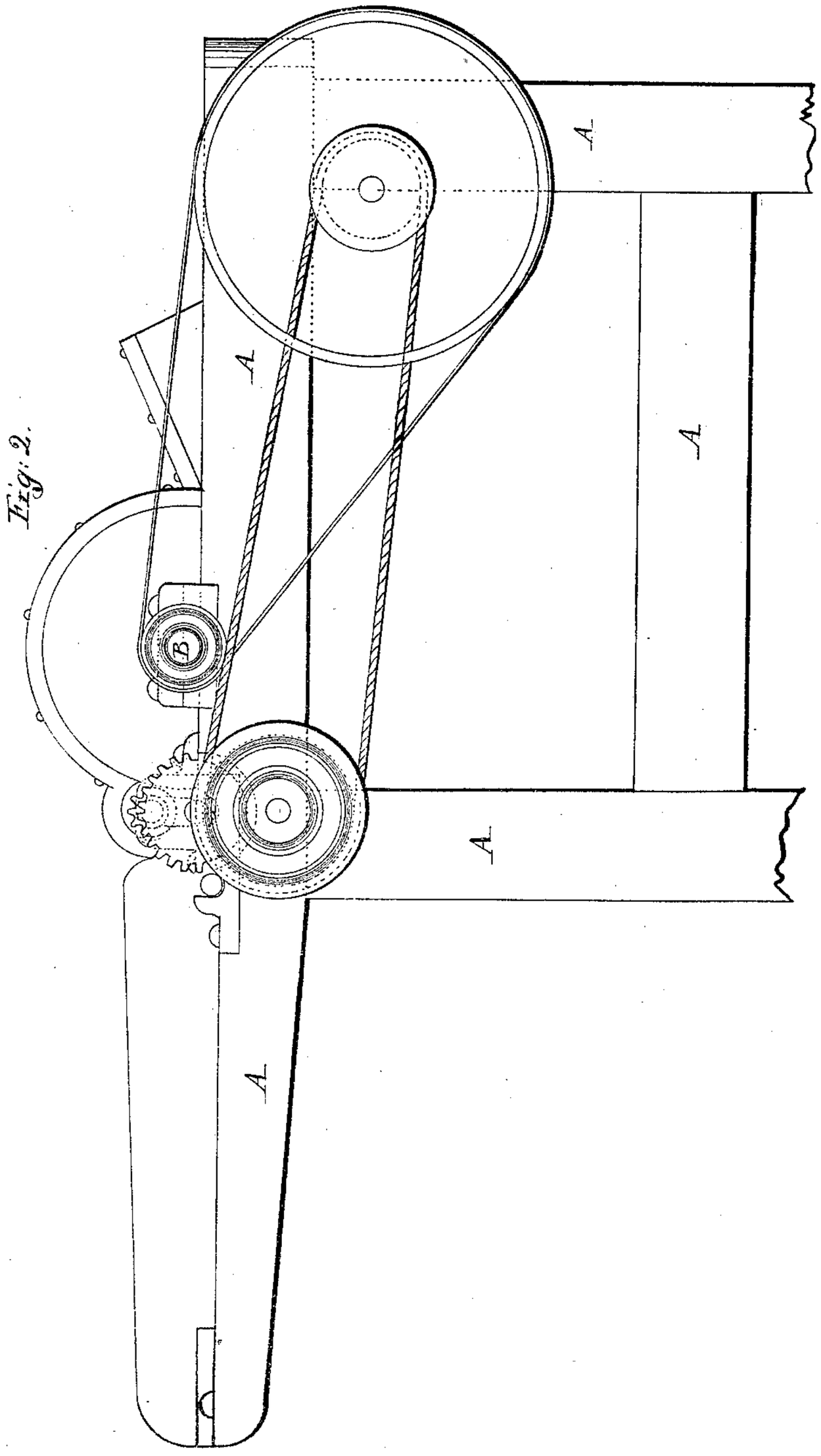
Fig. 2.



Sheet 3. 3 Sheets.

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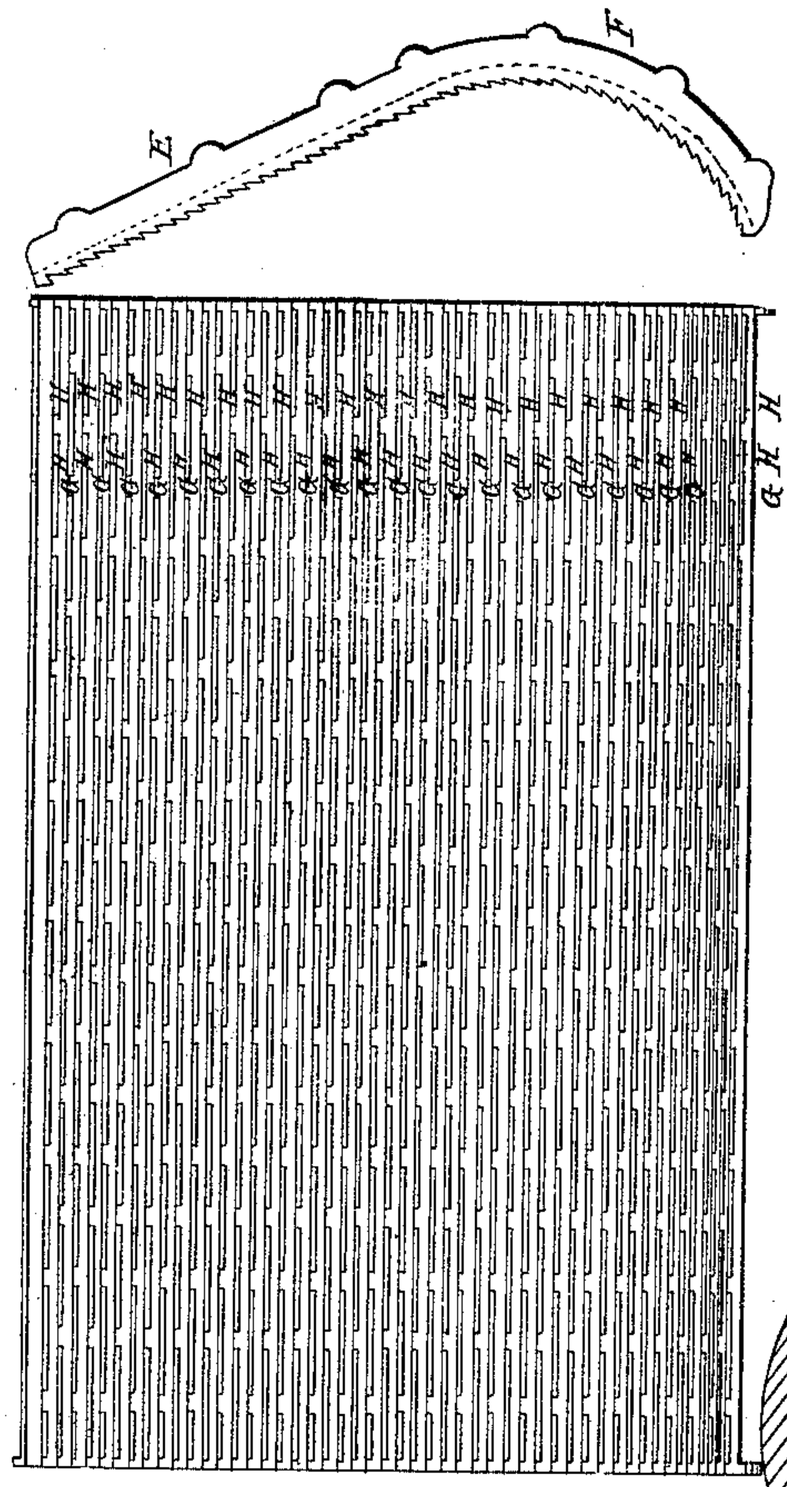

Fig. 4.

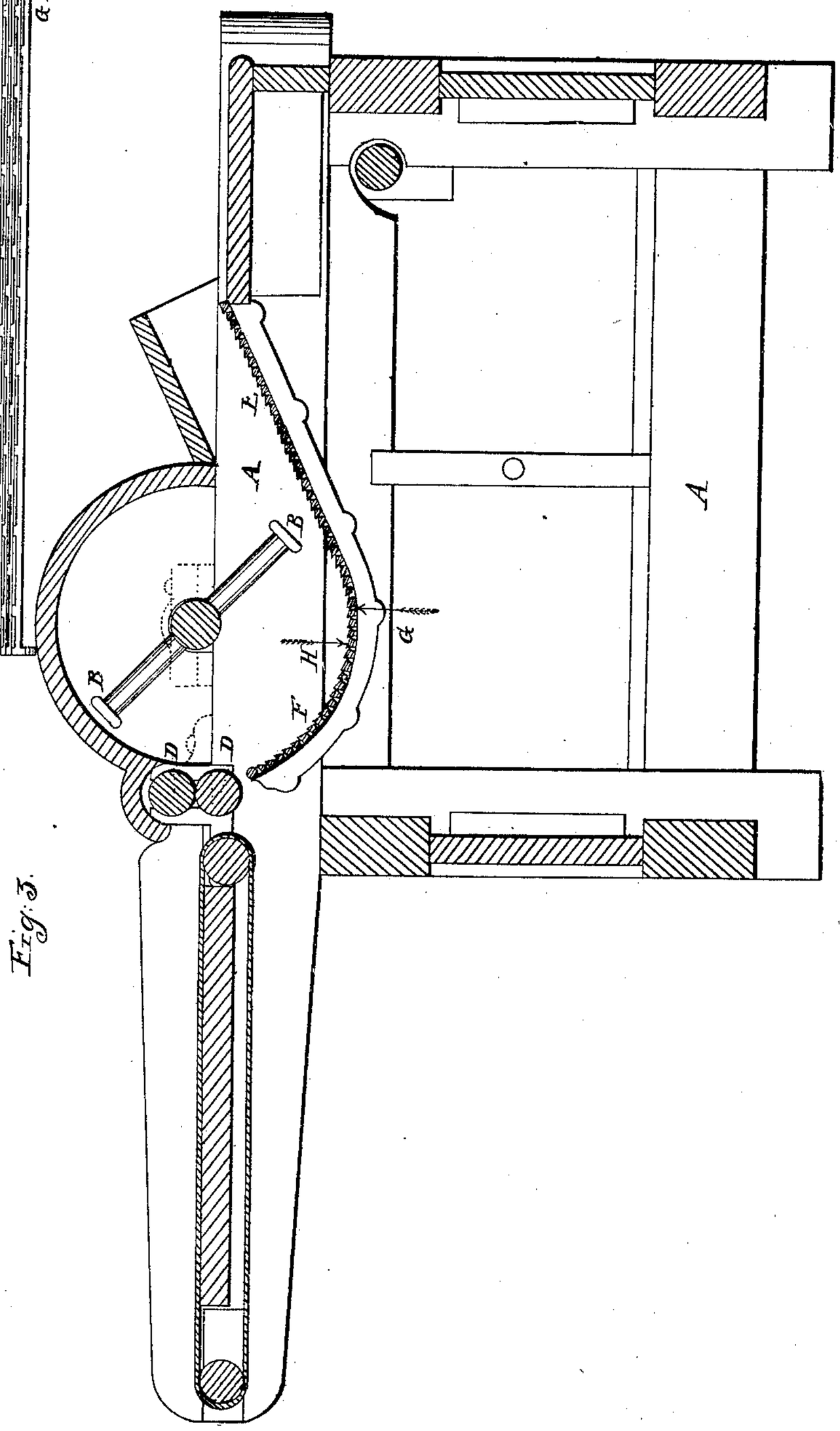

Fig. 3.

UNITED STATES PATENT OFFICE.

SAMUEL W. BROWN, OF LOWELL, MASSACHUSETTS.

MACHINERY FOR CLEANING COTTON.

Specification of Letters Patent No. 11,826, dated October 24, 1854.

To all whom it may concern:

Be it known that I, SAMUEL W. BROWN, of Lowell, in the county of Middlesex and State of Massachusetts, have invented a new and useful Picker for Picking Cotton and other Textile Substances; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, in which—

Figure 1, denotes a plan. Fig. 2, a side elevation. Fig. 3, denotes a longitudinal and vertical section at A, B, of Fig. 1. Fig. 4, denotes two views of the curb and rack as disconnected from the machine.

The nature of my invention consists in making the racks and curbs of pickers, of cast iron, or other substance, with apertures about three sixteenths of an inch wide, and about three inches long with a thickness of metal or other substance between the said apertures of about three sixteenths of an inch, so that the whole curb and rack will present a continuous series of apertures, and cross ties parallel or nearly so with each other, alternately connecting them together as hereafter specified, so that as the cotton or other textile substance passes through the machine, the curb and rack will present a continuous series of apertures except the cross ties, so that the said cotton or textile substance will pass through the picker without filling the said apertures and crowding them open, letting only the dust and dirt pass through the said apertures.

To enable persons skilled in the art of making and using pickers to make, construct, and use my invention, I will describe the same as follows.

I construct a frame as seen at A, A, Figs. 1, 2 and 3 of the drawing, then I construct a beater which can be seen at B B Fig. 3, the feed apron can be seen at Fig. 1, and in section at Fig. 3, and the feed rolls at D D Fig. 3. At E and F Figs. 3 and 4 can be seen the rack and curb, (the straight part I call the rack, and the curved part the curb) which are so constructed as to present a continuous series of apertures around which the metal is connected by cross ties, and the said curbs, and racks are cast solid or at one mold as seen in the drawing at Fig. 4, so that as the beater revolves and the cotton or other textile substance is fed into the machines, will be agitated and thrown forward over the apertures of the curb and rack and through the said machine.

The rack E and curb F made of cast iron or other similar metal substantially as seen in the drawing, will not spring together or apart in the apertures but will maintain at all times the same position, that is, the stringers H and cross ties G will maintain their relative positions when the cotton passes through the picker.

The curbs and racks in full sized machines may be cast in several sections with ears on the ends of each of them, by which they are screwed to the inside of the frame the apertures being left in the cast iron rack and curb as seen at Fig. 4, and consequently keeping one uniform position so that all dirt of every name and nature will more effectually and readily leave the cotton or other textile substance as it is agitated by the beater B and the edges of the rack, as the cotton is passing through the picker. The forward and top edge of the curb should be placed within one inch of the under surface of the under feed roll so as to let the cotton seeds pass through, by the first shocks of the beater.

It will be seen by inspection of Fig. 4, that each of the bars which compose the inside and upper side of the curb, and upper side of the rack is beveled down from the front to the back edge of the bars so as to form a series of parallel teeth or edges projecting toward the cotton, by which it is more perfectly picked and cleaned as it passes through the machine.

I have found by actual experiment that the rack E and curb F essentially as seen at Fig. 4, of the inclosed drawings to work more perfectly for picking cotton than either of the other devices that I have tried.

It will readily be understood that if more than one beater, with my curbs and racks attached, is wanted in one picker all that is necessary to do is to attach the required number by extending the machine lengthwise.

Having thus described the mode of making, constructing, and carrying out my invention, I will describe the manner of using it, which consists simply in running the cotton or other textile substance through the picker.

Having thus described my invention I disclaim a rack or grid made of bars of iron or wood so shaped as to present a flat surface,

or series of flat surfaces to the cotton or other substance as it is driven over them by the beater. Neither do I claim a rack or grid, the bars of which are round wires as both of these devices are well known.

I claim as my invention,

Making racks or grids to be used in cotton and other pickers, of a number of bars of iron or other substance, each of these bars being beveled to an edge, and these edges being so arranged and placed in the rack, that the cotton or other substance will first come in contact with the edges of the bars as it is thrown forward over them by the beater, the bars of these racks being tied or held together once in about three inches, more or less by cross ties they being cast with the bars of the racks, or otherwise firmly connected to the bars for the purpose of staying them, and always presenting parallel slots of equal width for the dirt to pass through, all being arranged and operated essentially in the manner and for the purposes set forth.

SAML. W. BROWN.

Witnesses:

GEO. P. ELLIOT,

H. G. F. CORLISS.