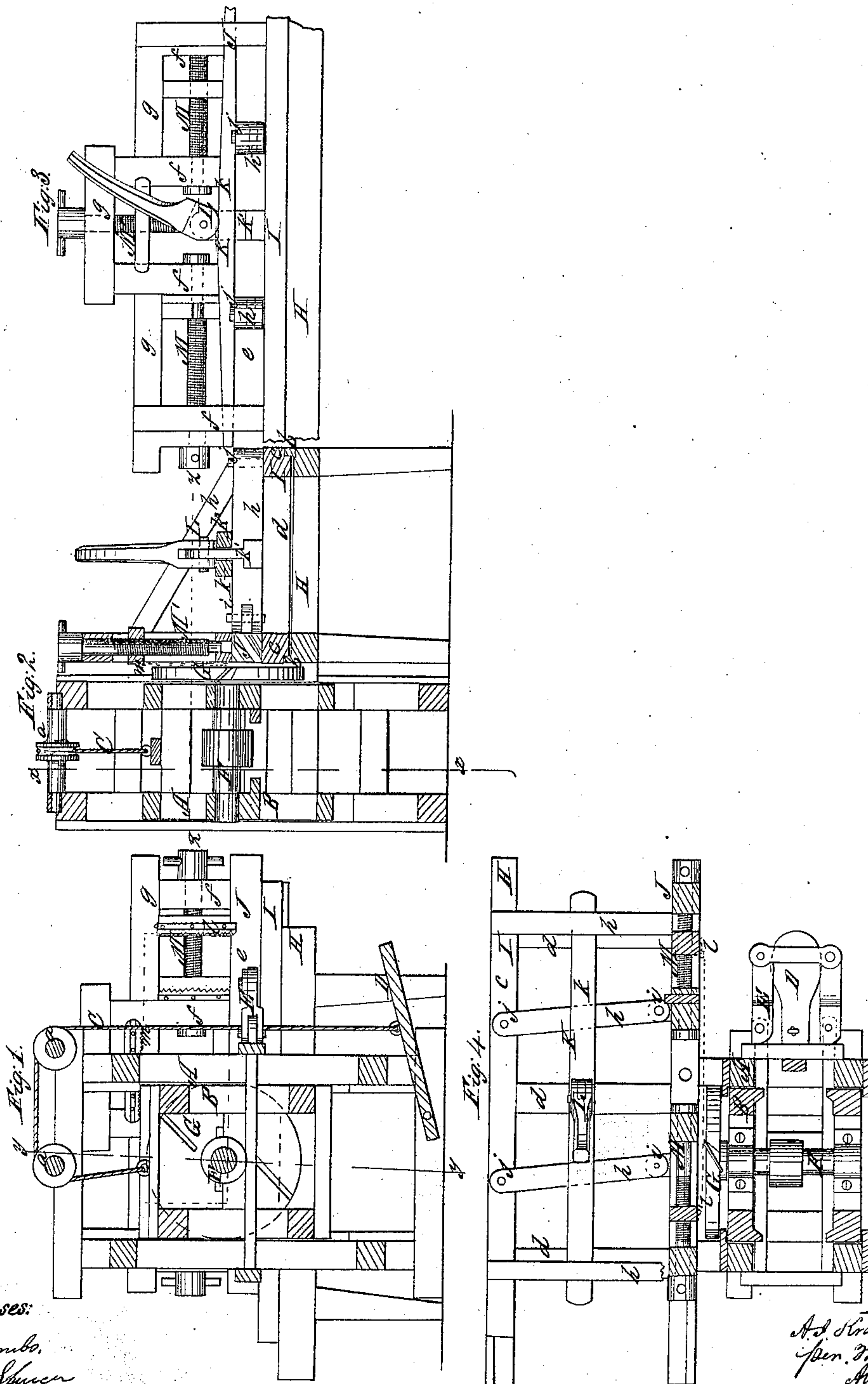


A. J. Kramer,
Wood Planing Machine.

No 30,903.

Patented Dec. 11, 1860.



Witnesses:

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UNITED STATES PATENT OFFICE.

A. J. KRAMER, OF MARION, IOWA, ASSIGNOR TO HIMSELF, BENJ. REECE, AND N. W. CLAFLIN, OF MARION, IOWA.

ARRANGEMENT OF PARTS IN ROTARY PLANERS.

Specification of Letters Patent No. 30,903, dated December 11, 1860.

To all whom it may concern:

Be it known that I, A. J. KRAMER, of Marion, in the county of Linn and State of Iowa, have invented a new and Improved
5 Wood-Planing Machine; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

10 Figure 1 is a sectional view of my invention taken in the line *x, x*, Fig. 2; Fig. 2, a sectional view of the same taken in the line *y, y*, Fig. 1; Fig. 3, a detached back view of the carriage to which the "stuff" to be
15 planed is attached; Fig. 4 a horizontal section of the whole machine taken in the line *z, z*, Fig. 2.

Similar letters of reference indicate corresponding parts in the several figures.

20 To enable those skilled in the art to fully understand and construct my invention I will proceed to describe it.

A, represents a rectangular upright frame in which a smaller sliding frame B, is fitted
25 and allowed to work freely up and down. This sliding frame B, has a cord or chain C, attached to it which passes over pulleys *a, a*, in the upper part of the frame and extending down is connected to a treadle D, as shown clearly in Fig. 1. To one side of
30 the frame B, there is attached a clamp E, which may be arranged in any proper way for holding the frame B, at any desired point in the scope of its movement in
35 frame A.

Within the frame B, there is placed an arbor F, at one end of which a circular disk G, is attached having planes fitted in it in the usual or in any proper way. The arbor
40 F, has a horizontal position and the planer head consequently rotates in a vertical plane.

To the upright frame A, there is secured a horizontal one H, on the upper part of which two parallel ways *b, b*, are placed,
45 the latter having a position at right angles with the planer shaft or arbor F, as shown clearly in Fig. 4. On the ways *b, b*, a carriage I, is placed and allowed to work freely thereon. This carriage is simply a frame
50 composed of two parallel bars *c, c*, connected by traverse bars *d*. On the carriage I, there

is placed a frame J. This frame is composed of a longitudinal bar *e*, which is fitted on the innermost bar *c*, of the carriage and has uprights *f*, attached which support horizontal bars *g*, as shown in Figs. 1, 2 and 3.
55 The frame J, is braced by bars *h*, and it is attached to the carriage I, by parallel bars *h, h*, the inner ends of which are attached by pins or joints *i*, to the bar *e*, of the frame J, the outer ends of said bars being attached
60 by pivots *j*, to the outer bar *c*, of the carriage. This attachment of the frame J, to the carriage I, admits of a curvilinear movement of the former toward and from the
65 planer disk G, by shoving the frame J, longitudinally on the carriage I.

The frame J, may be secured at any desired point on the carriage I, by means of a clamp K, which is formed of a bar *k*,
70 extending across the bars *h, h*, and fitted on a small upright *k'*, attached to a central traverse bar *d*, of the carriage, the upright *k'*, having an eccentric L, on its upper end by actuating which the bar *k*, may be
75 forced down on the bars *h, h*.

In the frame J, there are placed two vertical serrated jaws *l, l*, which are adjusted by screws M. There is also a horizontal serrated jaw *m*, which is adjusted by a
80 screw M'.

The operation is as follows: The arbor or shaft F, of the planer head G, may be rotated by any convenient power and the "stuff" to be planed shown in blue in Figs.
85 2 and 4, is secured to the frame J, by the jaws *l, l, m*. The carriage I, is then shoved along and the planer performs its work, smoothing the face of the "stuff" as the latter moves past it. The "stuff" may be
90 adjusted nearer to or farther from the planer and the latter rendered inoperative in a moment without stopping its rotation by moving the frame J, longitudinally on the carriage as previously alluded to, and
95 in case wide stuff is to be planed thereby requiring considerable power if the planer is allowed to act upon the whole surface at once, the planer may be elevated so as to act first upon the upper longitudinal half
100 of the "stuff" and be then lowered so as to act upon the lower half at a succeeding op-

eration the varying position of the saw being effected by adjusting the frame B, on the frame A.

Having thus described my invention what
5 I claim as new and desire to secure by Letters Patent is—

The arrangement of the vertically sliding rotary planer G, with the carriage I, ad-

justable clamp frame J, clamp K, eccentric L, jaws *l*, *l*, *m*, and screws M, M, M', as and 10
for the purposes herein shown and described.

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Witnesses:

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