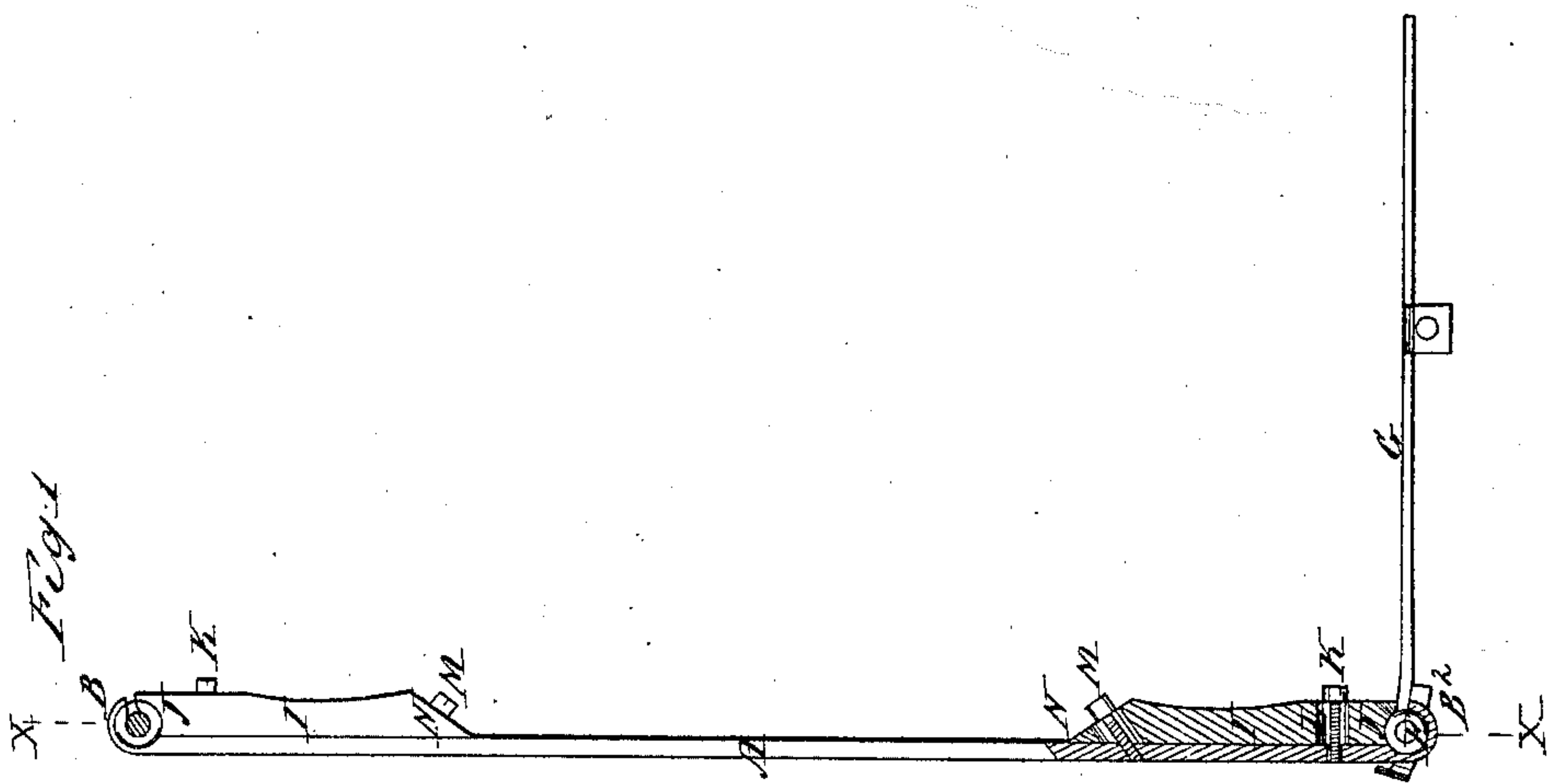
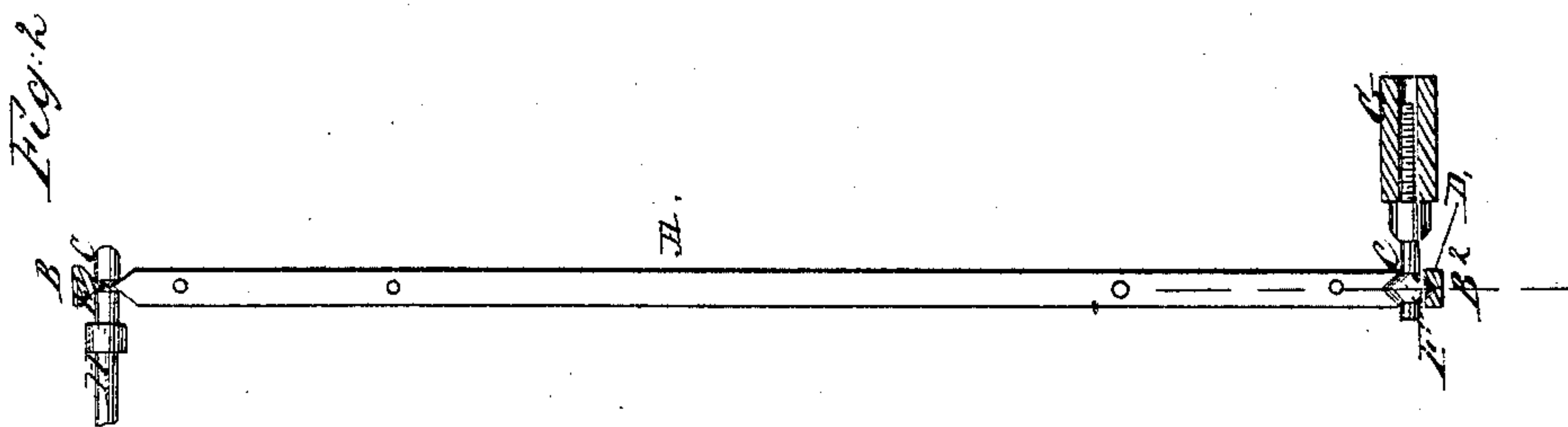


E. H. Craige,

Hanging Pitman Rods.

N^o 57,292.

Patented Aug. 21, 1866.



witnesses
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UNITED STATES PATENT OFFICE.

E. H. CRAIGE, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN THE MODE OF HANGING PITMEN, &c.

Specification forming part of Letters Patent No. 57,292, dated August 21, 1866.

To all whom it may concern:

Be it known that I, E. H. CRAIGE, of the city of Brooklyn and county of Kings, State of New York, have invented a new and Improved Mode of Hanging Connecting, Pitman, and other Rods in Machinery; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same.

The present invention relates more particularly to the manner of hanging the connecting or pitman rod to the treadle and crank-shaft of a sewing-machine, although it can be applied to many other and various purposes of a similar nature; and it consists in so forming the joint or hinge between the said rod and the treadle or crank-shaft, or both, as to greatly reduce the bearing-surfaces of the several parts, and thus obviate a considerable friction, and also to allow a lateral play or side motion to the rod without producing the least noise, while, at the same time, a perfectly secure and reliable joint is obtained; and, also, in so connecting the said rod with the treadle or crank-shaft, or both, that the joint can be tightened at pleasure as it becomes worn from use, as will be obvious from the following detail description of my improvements, reference being had to the accompanying plate of drawings, in which—

Figure 1 is an elevation of the connecting or pitman rod, showing it hung at one end to a treadle and at its other to a short spindle; and Fig. 2, a section taken through the pitman-rod in the plane of the line *xx*, Fig. 1.

A in the drawings represents the pitman or connecting rod, the length and size of which depend upon the machine in which it is to be used, this rod, at each end, B B², being bent over, forming a semicircular bearing, C, which in the one case, B², has an angular or V-shaped groove, D, made in and entirely around it, and in the other case, B, a similar V-shaped edge, E, corresponding to but the reverse of each of which in shape is a V-edge or lip around and on the arm or shaft F, projecting from and fixed to the inner end of the treadle foot or plate G, and a V-groove upon the short spindle or shaft H, to which the opposite end of the connecting-rod A is hung,

the bearings of both of these shafts F and H in their respective ends of the said pitman-rod A being completed by the pieces or bars I I, secured to the sides of the said rod A at the proper points thereof, and properly shaped at their ends J J, which bear against the said shafts F and H. These bars I I are both secured to the connecting-rod A by set-screws K, one to each bar, passing through short slots L of the same, extending in the direction of their length and screwing on the rod A, by loosening which screws K, and then turning the screws M, bearing against the beveled or inclined ends N N of the said bars I in the proper direction to force or move the said bars forward upon the connecting-rod A, their bearings can be tightened to any degree desired about the treadle shaft or arm F and spindle H, and when tightening the set-screws K they can be secured at such position.

From the above it is obvious that by hanging the connecting or pitman rod A in the manner described its bearing-surfaces are much reduced, consequently obviating a considerable amount of friction, and that, furthermore, the said rod can have a lateral or side play or motion without producing the least noise or rattle, as is the case with the mode now employed for hanging the said rod, and that by forming one portion of the bearings at each end of the rod A with the adjustable sliding bars I the wearing away of the bearings from use can be compensated for by properly setting up the said bars.

I claim as new and desire to secure by Letters Patent—

1. Forming the bearings or journals of connecting or other rods in machinery of a V or other equivalent shape thereto, substantially as herein described, for the purposes specified.

2. The adjustable slides or bars I, constituting a portion of the bearings or journals of connecting and other rods in machinery, when arranged upon the said rods so as to be susceptible of adjustment, substantially as and for the purposes described.

E. H. CRAIGE.

Witnesses:

WM. F. MCNAMARA,
ALBERT W. BROWN.