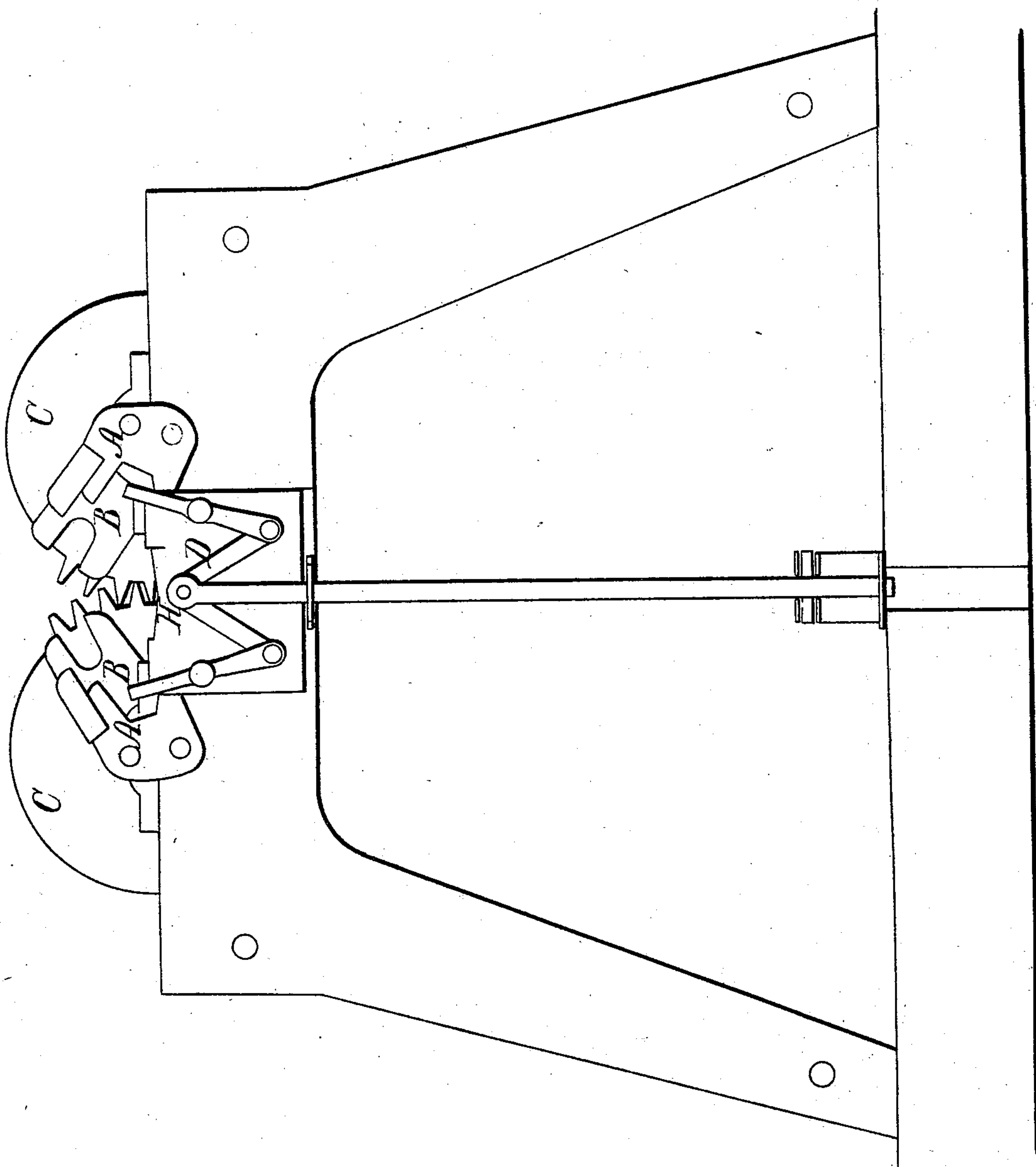


R. Archer,

Making Railroad Chairs.

No 17,773,

Patented July 14, 1857.



UNITED STATES PATENT OFFICE.

ROBERT ARCHER, OF RICHMOND, VIRGINIA.

MACHINE FOR MAKING RAILROAD-CHAIRS.

Specification of Letters Patent No. 17,773, dated July 14, 1857.

To all whom it may concern:

Be it known that I, ROBERT ARCHER, of the city of Richmond, in the State of Virginia, have invented a new and Improved
5 Mode for Making Wrought-Iron Railroad-Chairs; and I do hereby declare that the following is a full and exact description of the construction and operation of the same, reference being had to the annexed drawings of
10 a first elevation of the machine, making a part of this specification.

The nature of my invention consists in a cast-iron frame, supporting two parallel shafts, rotating back and forth by means of
15 two spur wheels marked C. On the end of each of these shafts are affixed cast steel or chilled iron knives or cutters A for cutting the lips of the chain, and about the middle of each shaft is affixed a cast-iron swage B moving
20 by the action of the shaft in the arc of a circle. Between these two swages the plate, after the lips have been cut and bent down at an angle of about 90 degrees on the man-

drel, is placed and the lips accurately bent down and swaged upon the mandrel. The 25 chain thus formed is placed under a drop or hammer and accurately straightened.

Attached to the machine is a system of levers D for centralizing and adjusting the chain plate, when placed on the mandrel, 30 resting on the support at H so as to insure uniformity in the lengths of the lips, irrespective of the length of the plates.

What I claim as my invention, and desire to secure by Letters Patent, is— 35

The use of the swages B constructed and operating in the manner specified and operating in connection with the adjusting levers D whereby uniformity in the length of the lips is secured without reference to the 40 length of the plate.

R. ARCHER.

Witnesses:

FRANCIS T. GLASGOW,
ROBERT S. ARCHER.