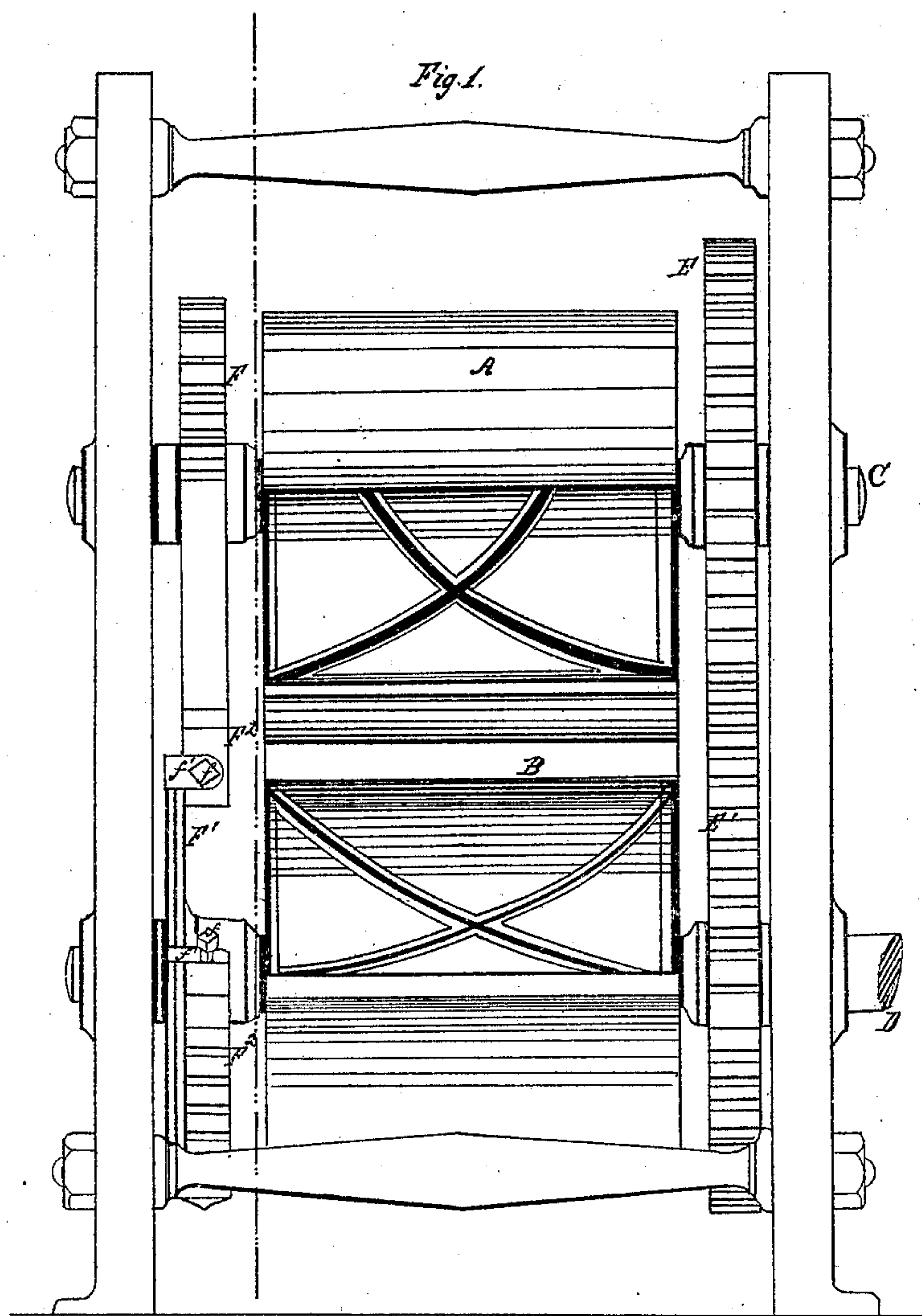


E. ALLEN.
PRINTING PRESS.

No. 73,943.

Patented Feb. 4, 1868.



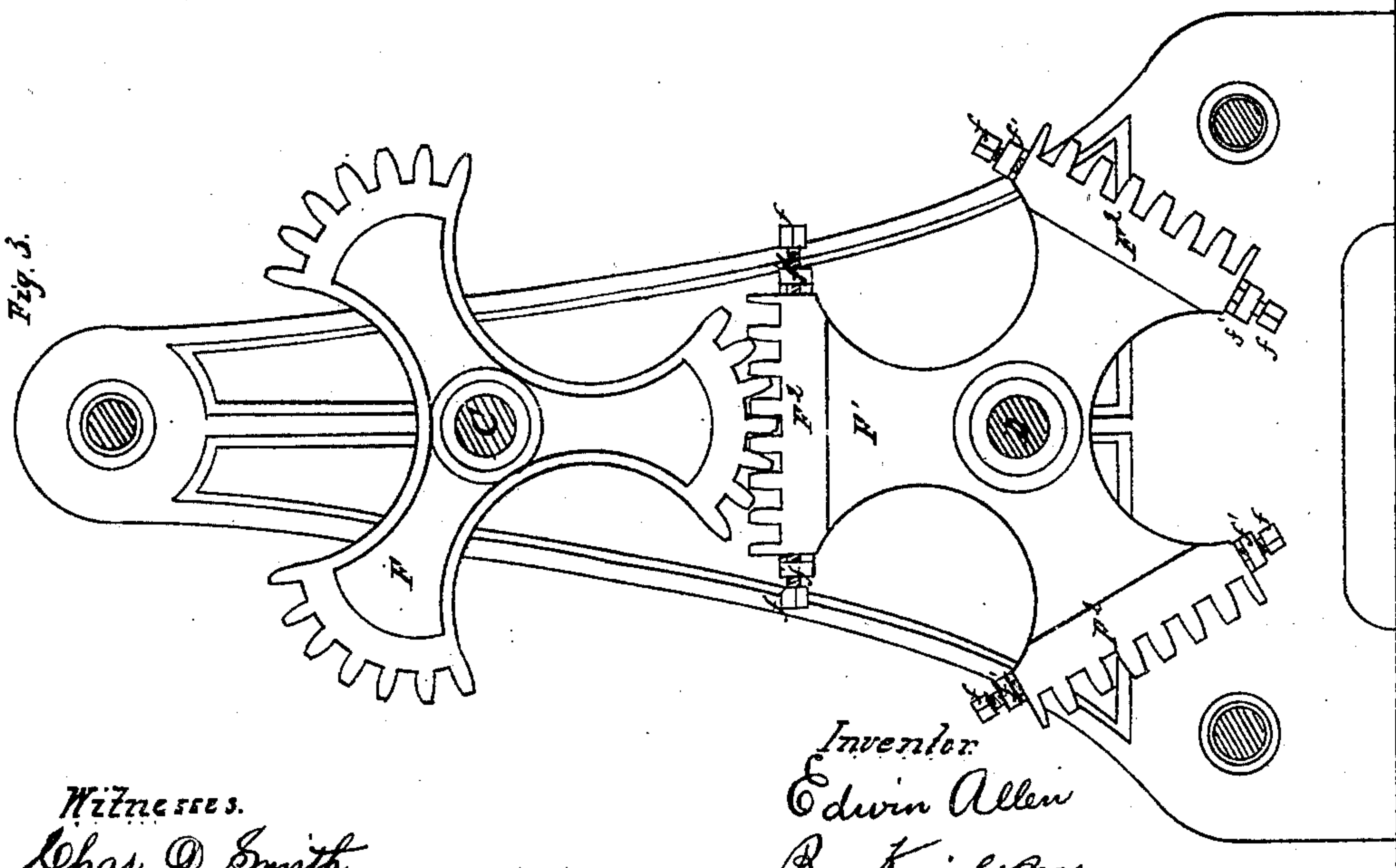
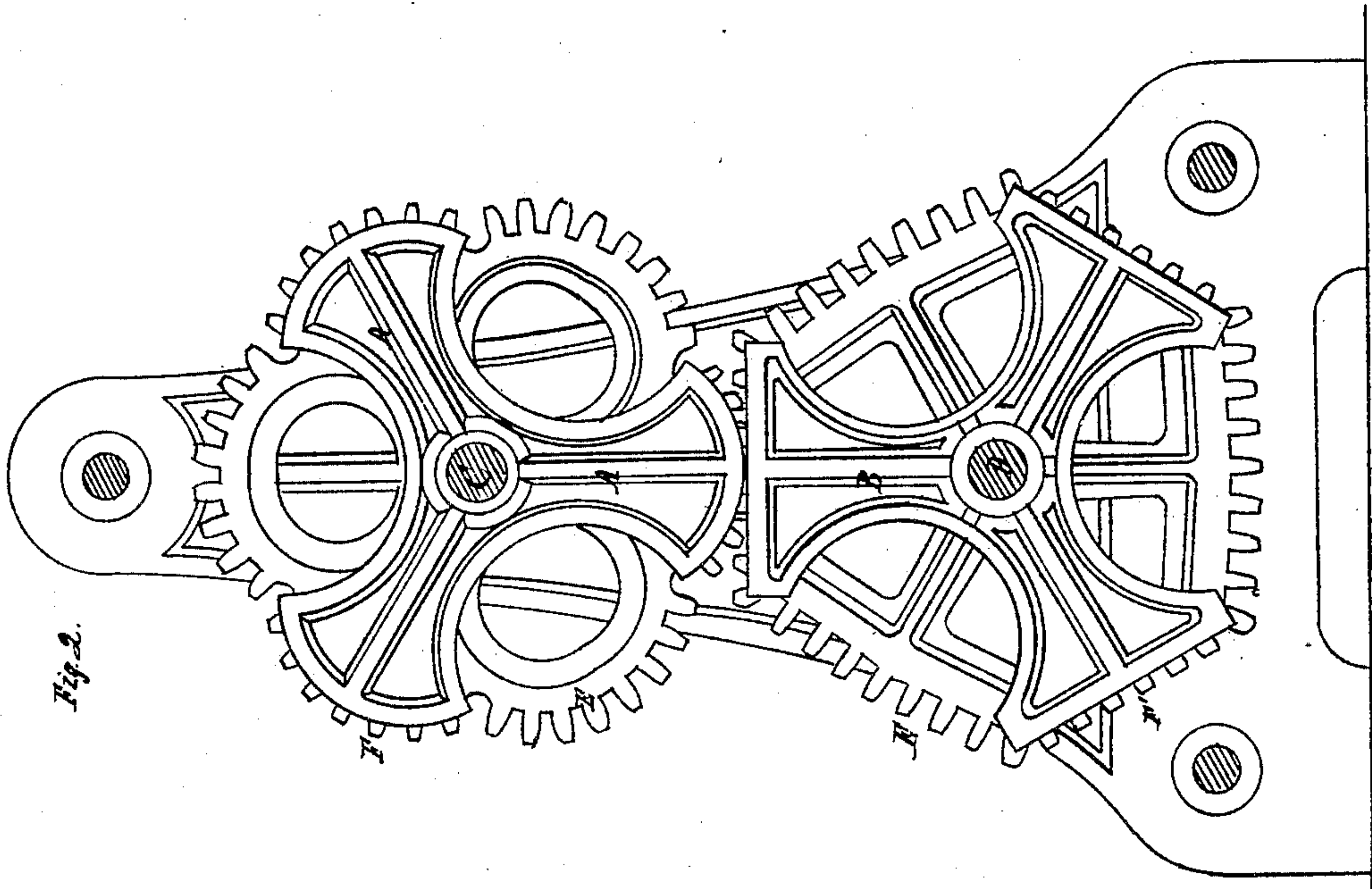
Witnesses.
Chas. D. Smith
J. E. M. Bowen

Inventor.
Edwin Allen
By *Knights*
Attorneys.

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United States Patent Office.

EDWIN ALLEN, OF NORWICH, CONNECTICUT, ASSIGNOR TO THE ALLEN
MANUFACTURING COMPANY.

Letters Patent No. 73,943, dated February 4, 1868.

IMPROVEMENT IN PRINTING-PRESSES.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, EDWIN ALLEN, of Norwich, New London county, and State of Connecticut, have invented a new and useful Improvement in Rotary Presses; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable any one skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification.

This invention relates to rotary presses for printing, cutting, stamping, or other purposes, whose cylinders are geared together by irregular cog-wheels so as to insure correspondence in their rotation.

My present invention consists in a method of adjusting the teeth of the driving-wheels in relation to each other, so as to correct inaccurate fitting, and preserve steady and regular motion.

In the drawings, A B may represent two press-cylinders; the convex surface of the upper, A, being made to act on the corresponding straight surfaces of the lower, B, by the rotation of the shafts C D, upon which they are respectively mounted in customary manner. E E' F F' represent two pairs of irregular cog-wheels, keyed to the shafts C D, and situated respectively at the opposite ends of the cylinders. These cog-wheels are constructed so as to operate upon the principle described in my application for Letters Patent of the United States, filed on the twenty-fourth day of August, A. D. 1867, and hence no special description of them need be given herein, except in so far as relates to the provision for their adjustment, in order to compensate for wear, and preserve accurate correspondence of movement. By applying these gear-wheels to both ends of the cylinders, as above described, an equable and uniform motion is imparted to the shafts throughout their entire length, and their torsion or twisting is entirely prevented. The operating portion of the wheel F¹ is made up of separate racks, or cogged sections F², which are made adjustable, in the direction of their length, by means of set-screws, f, by which they are each held between the lugs f' f', (see fig. 3.)

Now, it is manifest that any irregularity of motion, which may result from the wear of the cogs, or the inaccurate meshing thereof, may be rectified by setting or adjusting the sections so as to bring the cogs or teeth into the desired coincidence.

This device insures complete uniformity and regularity of motion, and prevents slippage or friction in the working-surfaces of the cylinders.

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

The rotary press, herein described, having one of its driving-wheels, F¹, provided with one or more adjustable segments or racks F², substantially as and for the purpose set forth.

To the above specification of my improvement in rotary presses, I have signed my hand, this 23d day of August, A. D. 1867.

EDWIN ALLEN.

Witnesses:

J. E. M. BOWEN,
OCTAVIUS KNIGHT.