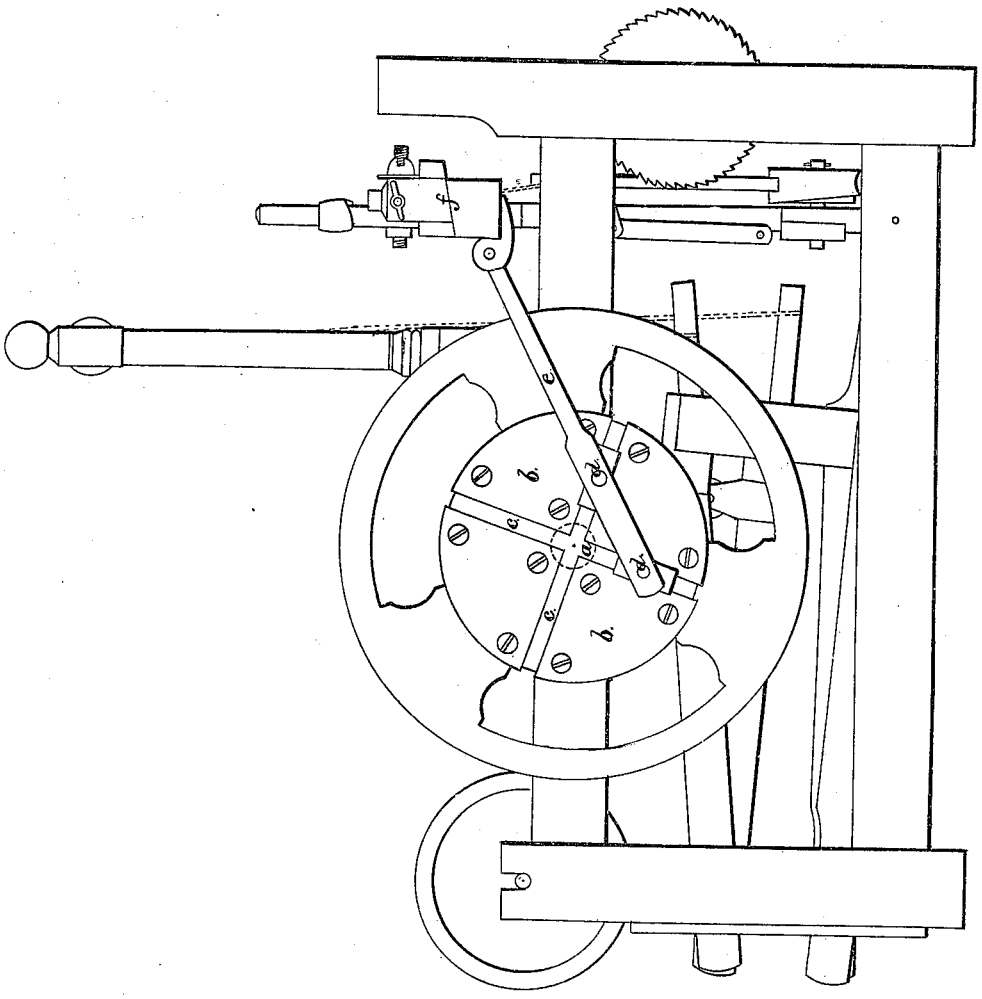
J. Wilson.

Loom.

No. 6487. Patented May 29, 1849.



UNITED STATES PATENT OFFICE.

JOHN WILSON, OF GENTSVILLE, SOUTH CAROLINA.

LOOM.

Specification of Letters Patent No. 6,487, dated May 29, 1849.

To all whom it may concern:

Be it known that I, JOHN WILSON, of Gentsville, in the district of Abbeville and State of South Carolina, have invented certain new and useful Improvements in Power-Looms, and that the following is a full, clear, and exact description of the principle or character which distinguishes them from all other things before known and of the usual manner of making, modifying, and using the same, reference being had to the accompanying drawing, in which—

Figure 1 is a side elevation of the loom.

My loom is made in all its parts like the ordinary power loom except in the parts specifically described. The object of the invention being to dispense with one of the shafts of the loom and all the cog gearing.

The improvements consist in the shaft (*a*) commonly called the cam shaft, in the position usually occupied by the crank shaft, and affixing to each end thereof an apparatus which I denominate the quadrangular wheel that are connected with the lay, so as to give two beats to every revolution of the shaft.

The construction and operation of this quadrangular wheel is precisely similar to the well known trammels for drawing elipses, and consists of a wheel (*b*) in which two grooves (*c*) are formed at right angles to each other and crossing at the center; in each of these grooves there are sliding pieces to which studs or pins (*d*) are affixed, these pins pass through a bar (*e*) at two different points, the distance between which determines the length of the beat of the lay (*f*) with which it is connected in the usual position of the pitman in ordinary crank looms; by this construction it will be obvious that as I make one revolution of the cam shaft the lay will perform two beats. The other parts of the loom are worked by cams in the ordinary way attached to the same shaft. The quadrangular wheel may be formed of any suitable metal, and the shafts may be driven by a loose pulley coupled thereto by a common gland clutch fixtures that are too common and well known by every machinist to require a particular description here.

Having thus fully described my improvement, what I claim therein as new and for which I desire to secure Letters Patent, is—

The combination of the quadrant, wheel, or trammel, with the cam shaft of a power loom by means of which I can locate the said shaft in the position of the crank shaft, and dispense with one shaft, and the ordinary gearing connected therewith.

JNO. WILSON.

Witnesses:
F. RICE,
J. R. TOWERS.