

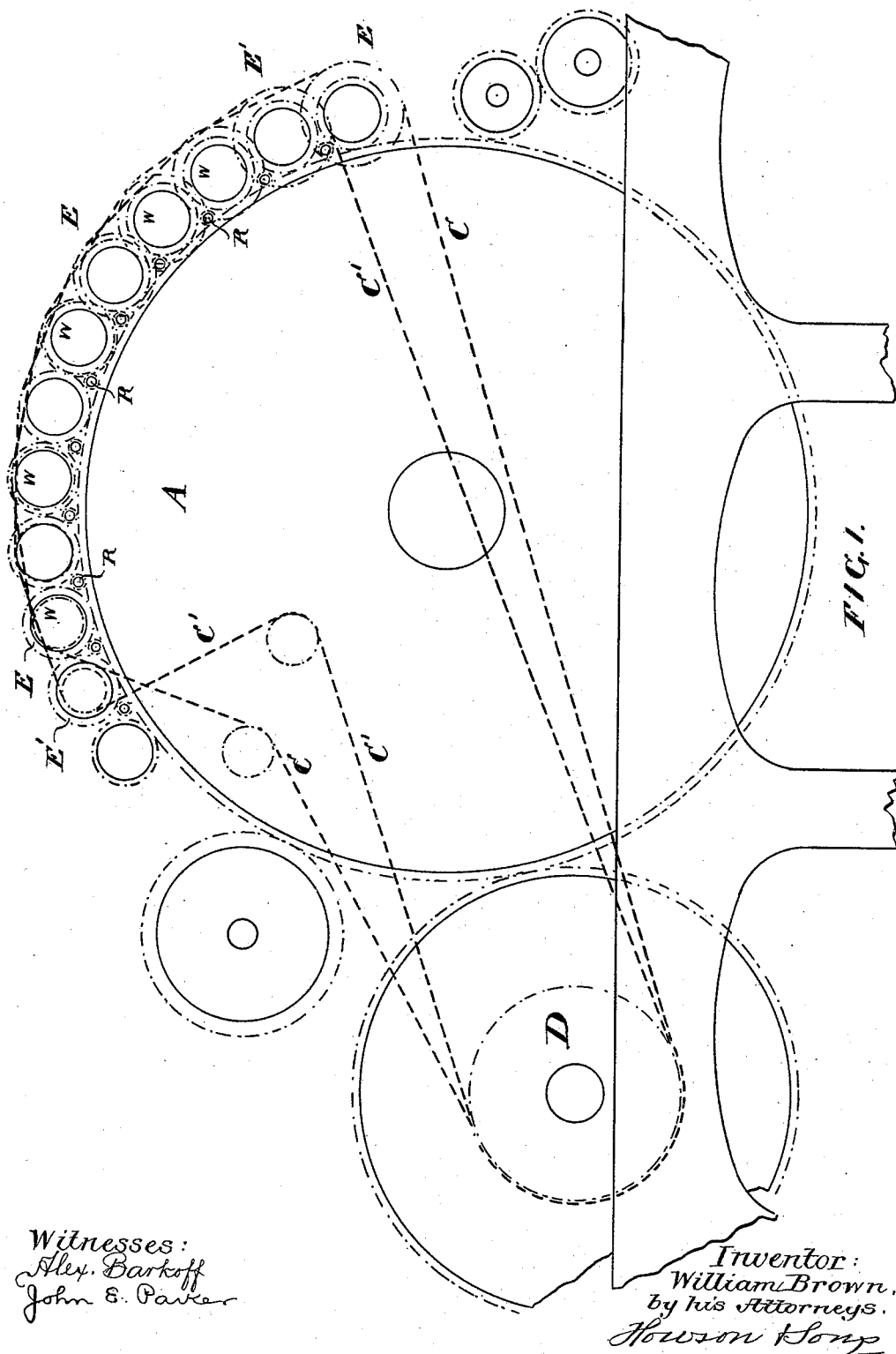
(No Model.)

3 Sheets—Sheet 1.

W. BROWN.
CARDING ENGINE.

No. 383,435.

Patented May 29, 1888.



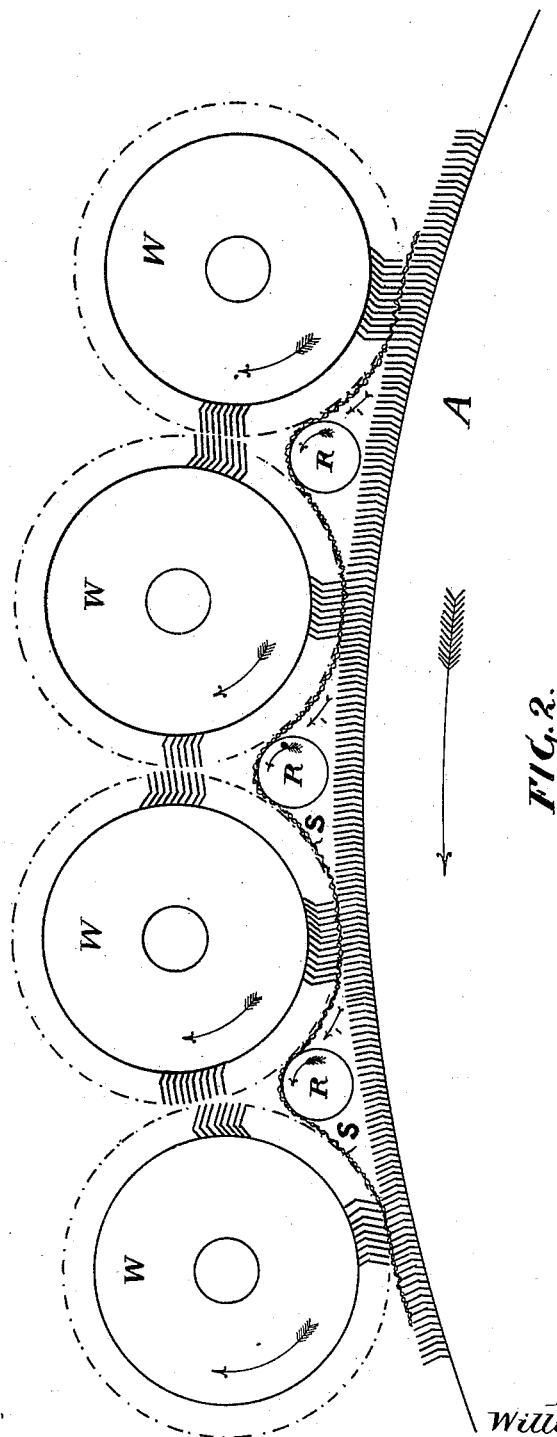
(No Model.)

3 Sheets—Sheet 2.

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Patented May 29, 1888.



Witnesses:
Alex. Barkoff.
John E. Parker.

Inventor,
William Brown.
by his Attorneys,
Houison & Sons.

(No Model.)

3 Sheets—Sheet 3.

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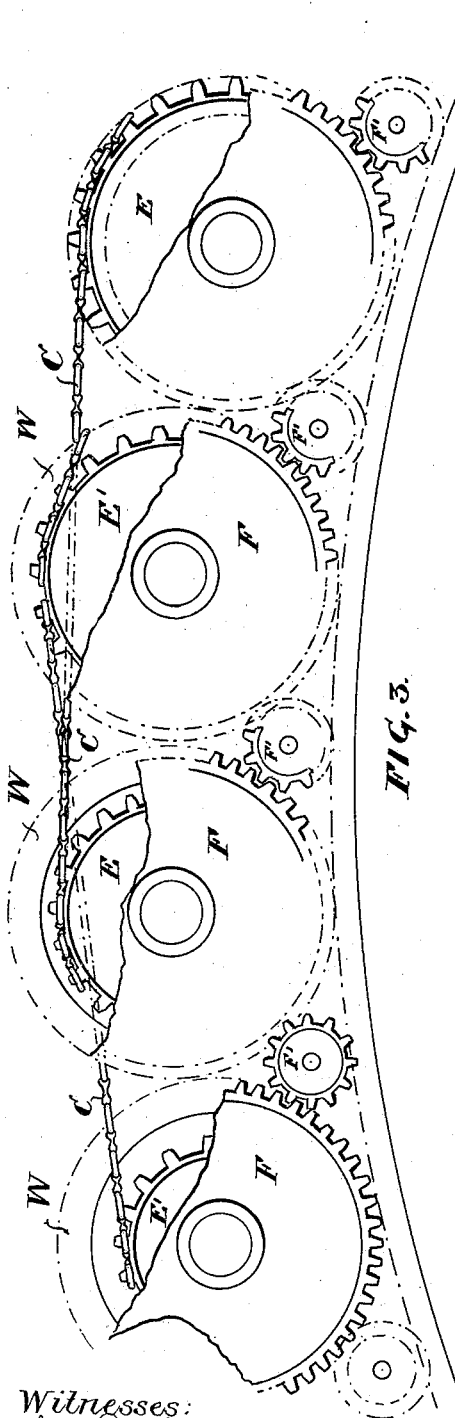


FIG. 3.

Witnesses:
Alex. Barhoff,
John E. Parker.

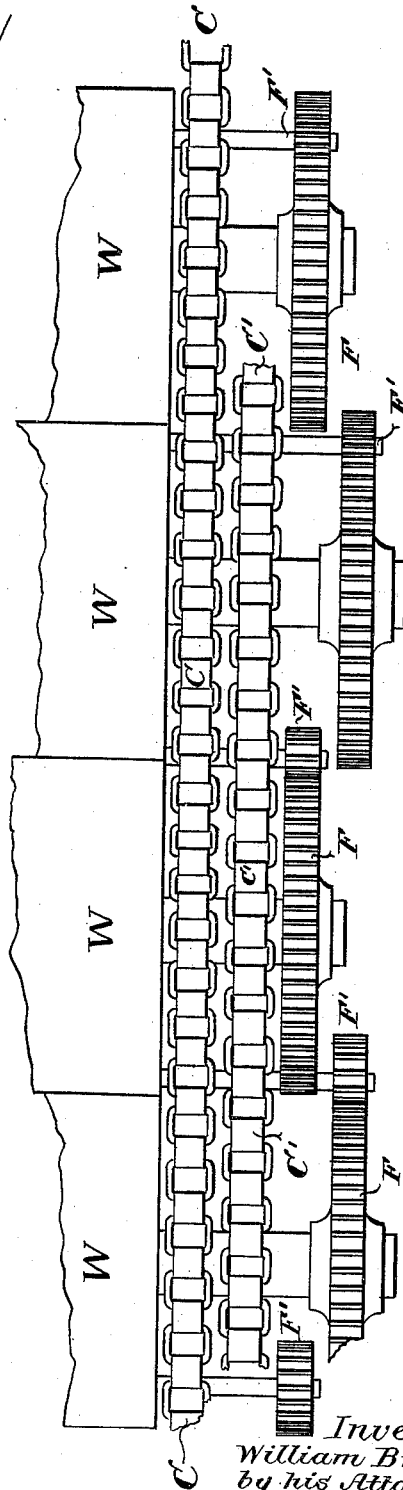


FIG. 4.

Inventor,
William Brown,
by his Attorneys,
Howson & Sons.

UNITED STATES PATENT OFFICE.

WILLIAM BROWN, OF SELKIRK, SCOTLAND.

CARDING-ENGINE.

SPECIFICATION forming part of Letters Patent No. 383,435, dated May 29, 1888.

Application filed August 10, 1887. Serial No. 246,578. (No model.) Patented in England February 17, 1887, No. 2,455.

To all whom it may concern:

Be it known that I, WILLIAM BROWN, a subject of the Queen of Great Britain and Ireland, and residing at Selkirk, in the county of Selkirk, Scotland, have invented certain Improvements in Carding-Engines, (for which I have obtained British Patent No. 2,455, dated February 17, 1887,) of which the following is a specification.

This invention relates to certain improvements in carding-engines, and has for its object the arrangement of the machine or engine in such a manner that the fibrous material in passing through the machine or engine is operated upon in an unbroken sliver, sheet, or web, so as to produce when spun, worsted-like yarn with ordinary wool without the same having to go through the operation of combing. Hitherto in this class of machines the wool or fibrous material in passing through with the cylinder has been taken up by the workers, the latter revolving in a contrary direction to the cylinders, and by means of the strippers the wool is cleared from the workers and returned to the cylinder, which mode of carding gives to the wool a confused appearance.

I accomplish my object by dispensing with the strippers and mounting a succession of workers over a portion of the circumference of the cylinder, placing between each pair of workers a small roller, by which the fiber is prevented from falling onto or touching the cylinder until it reaches the point of contact of the following worker and the cylinder, by which means the fiber is always carded in one direction and delivered in a regular sheet, web, or sliver to the doffer of the ordinary construction.

In order to more fully explain my invention I have appended three sheets of drawings, in which—

Figure 1 represents a side view in outline of a portion of a carding-engine, sufficient to explain my invention. Fig. 2 is a detail of a portion of the cylinder with some workers and my additional rollers shown thereon; Fig. 3, a detail showing a mode of operating the workers and additional rollers, and Fig. 4 is a plan of the same.

The ordinary cylinder covered with card-cloth is indicated by the letter A, and the workers W are mounted on suitable brackets, which

may be of the ordinary construction, attached to the frame-work, and my additional rollers, R, placed between the workers W, may be carried by similar brackets to those carrying the workers.

The workers W are driven in the ordinary manner by chains or other suitable gearing. In the drawings I have shown them driven by chains C and C', operated by the pulley D, and conducted somewhat in the manner shown by dotted lines on Fig. 1, the chain C passing over wheels E, and chain C' over wheels E', secured on the respective worker-shafts.

The series of wheels E and E' have not all the same number of teeth, the first wheel at the feeding side of the cylinder A having the most, and the number on each wheel diminishing with each successive worker toward the doffing or delivery side of the cylinder, so that the last worker of the doffing side rotates the quickest. All the other workers preceding it revolve gradually slower in proportion to the number of teeth on the chain-delivery wheels E or E', the first worker at the feeding side being the slowest. Each of my additional rollers R has a surface speed equal to that of the following worker, motion being given to the said rollers by spur-wheels F and F', mounted on the respective worker and additional roller-shafts, or the latter may be driven by chains or bands the same as the workers.

The directions of the rotation of cylinder A, workers W, and my additional rollers, R, are indicated by the arrows as shown on the drawings, and the fibrous unbroken sliver, sheet, or web passing along in one direction only, at S, in one continuous sheet, is indicated by arrow 1.

What I claim is—

The combination of the main cylinder of a carding-engine, and workers therefor, with rotary rollers between the workers to carry and feed the lap from one worker to the next, all substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM BROWN.

Witnesses:

JOHN STEEDMAN,

WILLIAM LYON,

Both of Selkirk, Solicitors.

