

J. K. WRIGHT.
Doffer-Comb.

No. 224,980.

Patented Feb. 24, 1880.

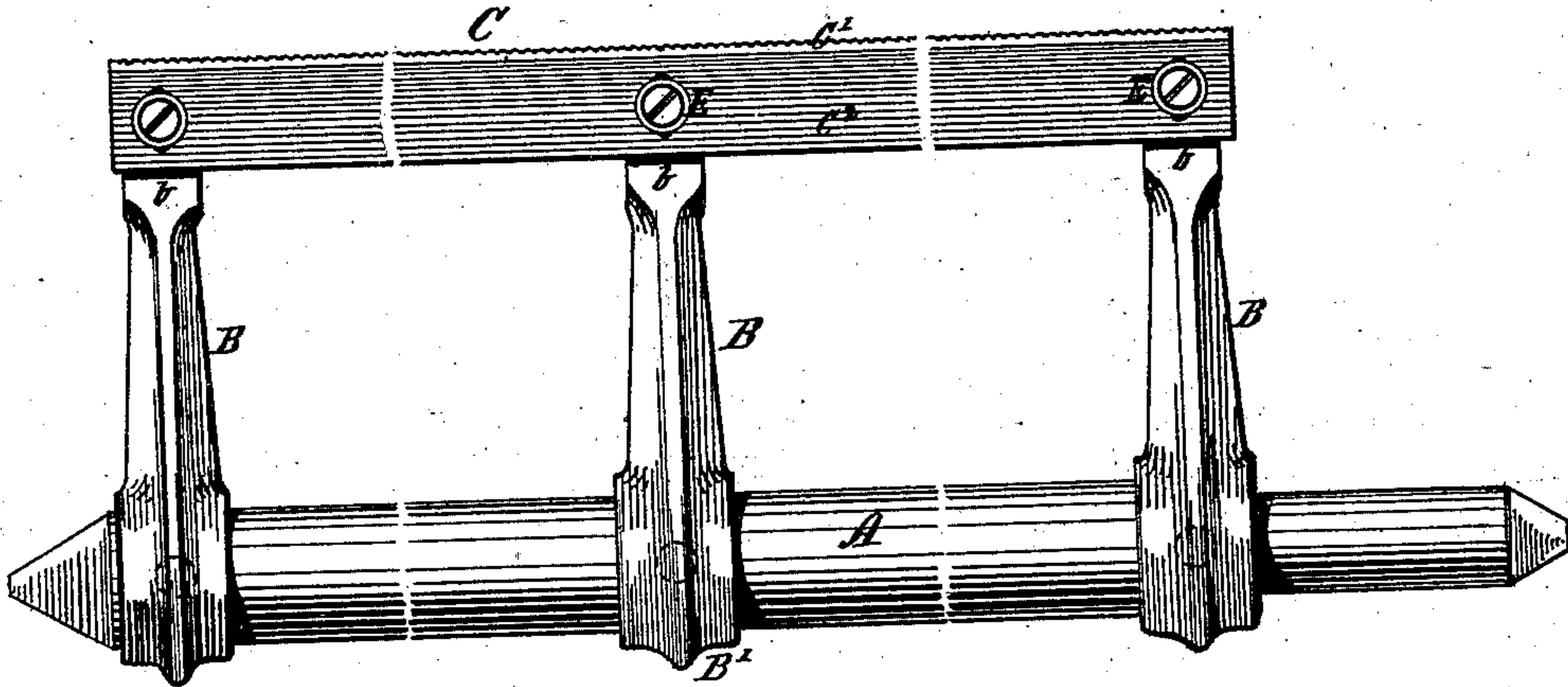


Fig. 1

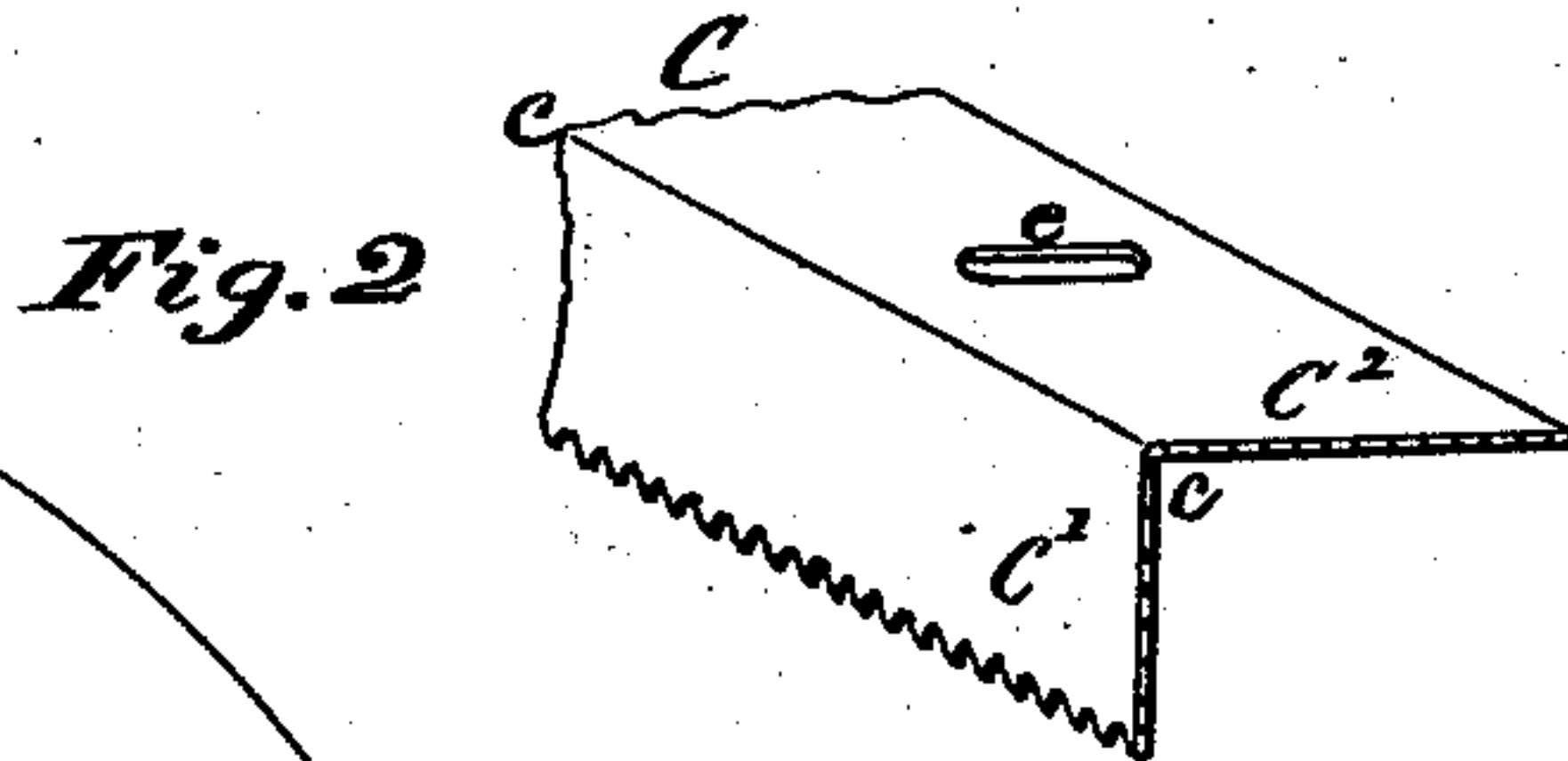


Fig. 2

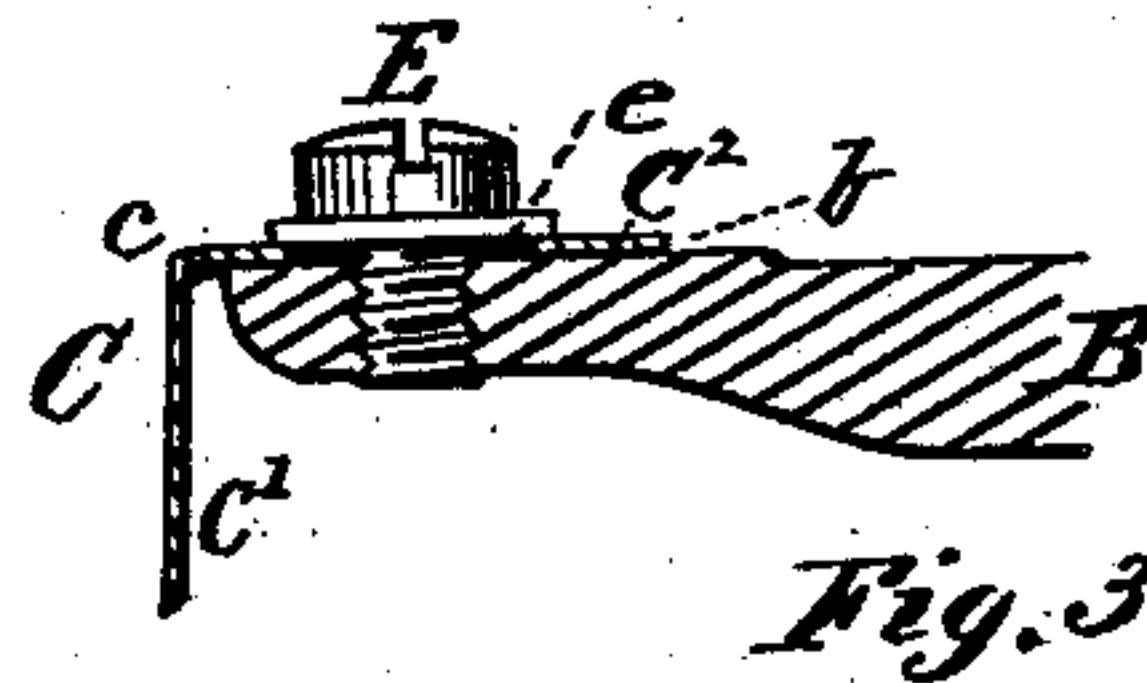


Fig. 3

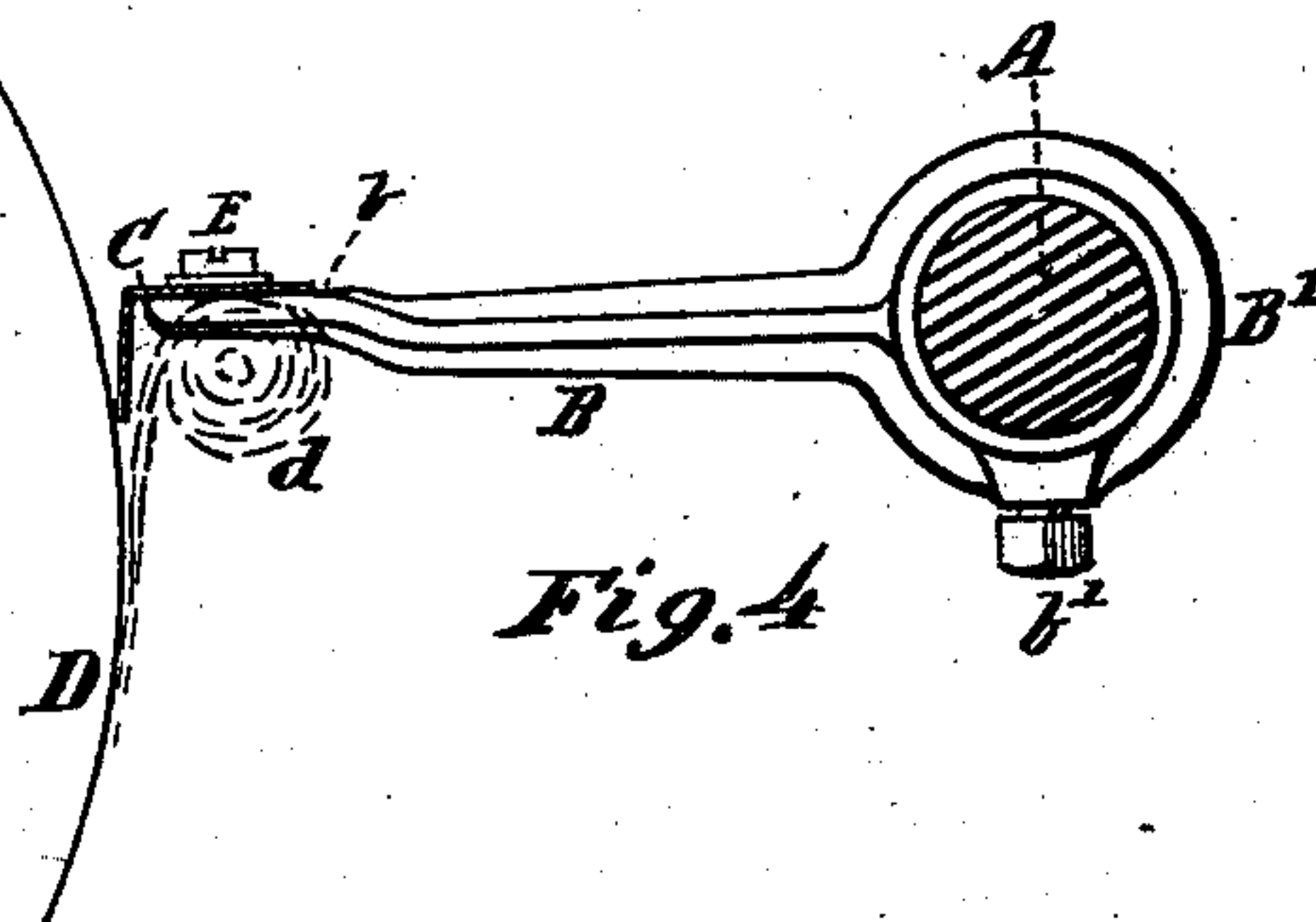


Fig. 4

Witnesses,

Chas D Gay.
S. R. Barton.

Inventor,

John K. Wright
By Chas H. Durling
Atty.

UNITED STATES PATENT OFFICE.

JOHN K. WRIGHT, OF WORCESTER, MASSACHUSETTS, ASSIGNOR TO EDWARD
WRIGHT & CO., OF SAME PLACE.

DOFFER-COMB.

SPECIFICATION forming part of Letters Patent No. 224,980, dated February 24, 1880.

Application filed May 5, 1879.

To all whom it may concern:

Be it known that I, JOHN K. WRIGHT, of Worcester, in the county of Worcester and State of Massachusetts, have invented certain
5 new and useful Improvements in Doffer-Combs; and I declare the following to be a description of my said invention sufficiently full, clear, and exact to enable others skilled in the art to which it appertains to make and use the
10 same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 represents a plan view of my improved doffer-comb mechanism. Fig. 2 is a
15 perspective view of a portion of the comb-plate. Fig. 3 is a transverse section of the comb-plate, its adjusting devices and supporting-fingers; and Fig. 4 is a transverse sectional view, showing the comb-plate, shaft,
20 and doffer-cylinder.

My invention relates to certain improvements in the construction of doffer-comb mechanism for carding-machines, with a view to provide a light-running and efficient mechanism adapted for very high speed.

In the drawings, A denotes the shaft, B the supporting-fingers, and C the comb-plate. The length of the shaft B and comb-plate C may be made to correspond with the width of
30 the machine whereon they are to be used, and three to five (more or less) fingers, B, may be employed, according to the length of comb used.

The fingers B are provided with rings or
35 hubs B', which surround the shaft A, to which they are rigidly secured by the set-screws b', while the projecting portions of said fingers B are properly ribbed to give strength with light weight, and their extremities made thin and
40 flattened, as shown at b, on their upper surfaces.

The comb-plate C is of very thin metal, having a longitudinal bend or fold, as at c, the front portion, C', being turned downward so as
45 to stand at an angle of about ninety-five degrees, or nearly at a right angle, with the back or horizontal portion, C², as illustrated, and the small saw-like teeth, for combing the fiber from

the face of the doffer-cylinder D, are formed along the edge of said portion C', while the
50 back or guard portion, C², of the comb-plate is seated on the horizontally-flattened surfaces b at the ends of the supporting-fingers B, to which the comb-plate is secured by the screws E, which pass through transverse slots e,
55 formed in the comb-plate C, and screw into tapped openings in the finger ends, as shown, so that by loosening the screws the comb-plate can be adjusted toward or from the surface of the doffer-cylinder D, as may be required for
60 accuracy of operation.

It will be understood that when used the vibrator-shaft A is to be mounted in suitable bearings on the carding-machine and connected with suitable mechanism for imparting
65 the necessary vibratory movement thereto.

The comb mechanism, when constructed as herein shown and described, is rendered very strong and rigid, while at the same time it is extremely light and may be operated at a high
70 rate of speed, and it effects the combing down of the fiber in a superior manner, the mass of fiber d, as it comes from the doffer-surface, being condensed and rolled together more evenly and uniformly than with the ordinary comb
75 devices.

I do not herein make claim, broadly, to a comb-plate made in angular form, as I am aware that an angularly-formed comb-plate has been heretofore shown and described in
80 an English patent; neither do I claim, broadly, an adjustable supporting-finger; but

What I claim, and desire to secure by Letters Patent, is—

The combination, with the vibrator-shaft A,
85 provided with fingers B, having flat upper surfaces, b, of the angularly-formed comb-plate attached to the ends of said fingers, and adapted to be adjustable thereon, all substantially as hereinbefore described.

Witness my hand this 10th day of April, A.
D. 1879.

JOHN K. WRIGHT.

Witnesses:

CHAS. H. BURLEIGH,
J. WALTER SMITH.