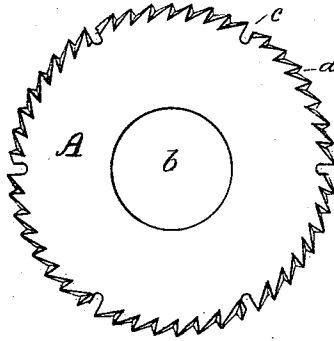


W. DANIELS.

Cutter and Perforator for Paper.

No. 167,308.

Patented Aug. 31, 1875.



WITNESSES:

Jas E Oliphant
Chas. H. Fawcett

INVENTOR.

William Daniels
per Charles H. Fawcett
ATTORNEY.

UNITED STATES PATENT OFFICE.

WILLIAM DANIELS, OF BROOKLYN, NEW YORK:

IMPROVEMENT IN CUTTERS AND PERFORATORS FOR PAPER.

Specification forming part of Letters Patent No. **167,308**, dated August 31, 1875; application filed June 22, 1875.

To all whom it may concern:

Be it known that I, WILLIAM DANIELS, of Brooklyn, in the county of Kings and State of New York, have invented a new and valuable Improvement in Circular Cutter and Perforator for Paper; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

My improvement relates to that class of cutters known as circular cutters, used for the purpose of cutting paper while being folded or printed; and the object of my invention is to produce a cutter that will, during the process of cutting, leave a filament at suitable distances between the line of incisions, for the purpose of retaining the sheets together in the process of folding or printing, and also to facilitate the opening of the folded sheets by simply passing the finger or hand between the same, and separating the filaments that hold the sheets together.

My invention therefore consists of a circular cutter with teeth upon its periphery having bevel or knife edges, such cutter also having, at suitable intervals, incisions of sufficient depth to extend below the cutting-surface of the teeth, as will be hereinafter described.

In the drawing, A is designed to represent

a cutter formed of a circular plate of steel, and having upon its periphery teeth formed with bevel or knife edges *a*, and a central opening, *b*, for the purpose of placing the cutter upon the attachment ordinarily used in folding-machines. At suitable distances apart, or at intervals, there are formed incisions *c*, of the required depth, or extending below the cutting-surfaces of the teeth, so that when the incisions reach the cutting-point it will leave a small filament sufficient to hold the sheets together during the process of folding or printing, and also greatly facilitate the separation of the sheets by simply passing the finger or hand between them and severing the parts left uncut.

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

The circular cutter A, having teeth upon its periphery, with bevel or knife edges *a*, and incisions *c* at suitable intervals, and of sufficient depth to extend below the cutting-surface of the teeth, substantially as and for the purpose specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

WILLIAM DANIELS.

Witnesses:

NAT. E. OLIPHANT,
P. J. BOLAND.