

(No Model.)

E. GREGORY.
BOOK AND BINDING THEREOF.

No. 549,290.

Patented Nov. 5, 1895.

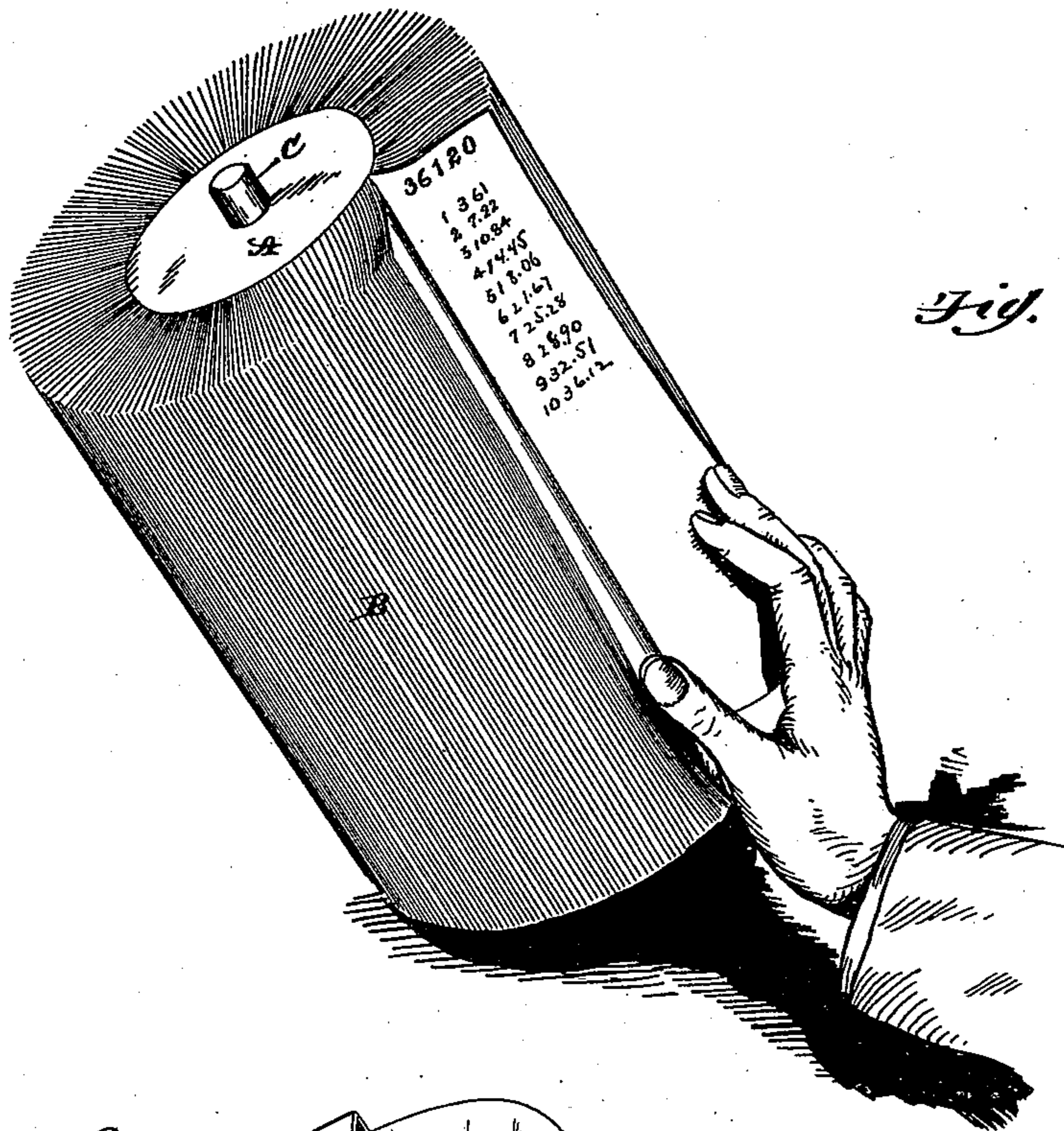
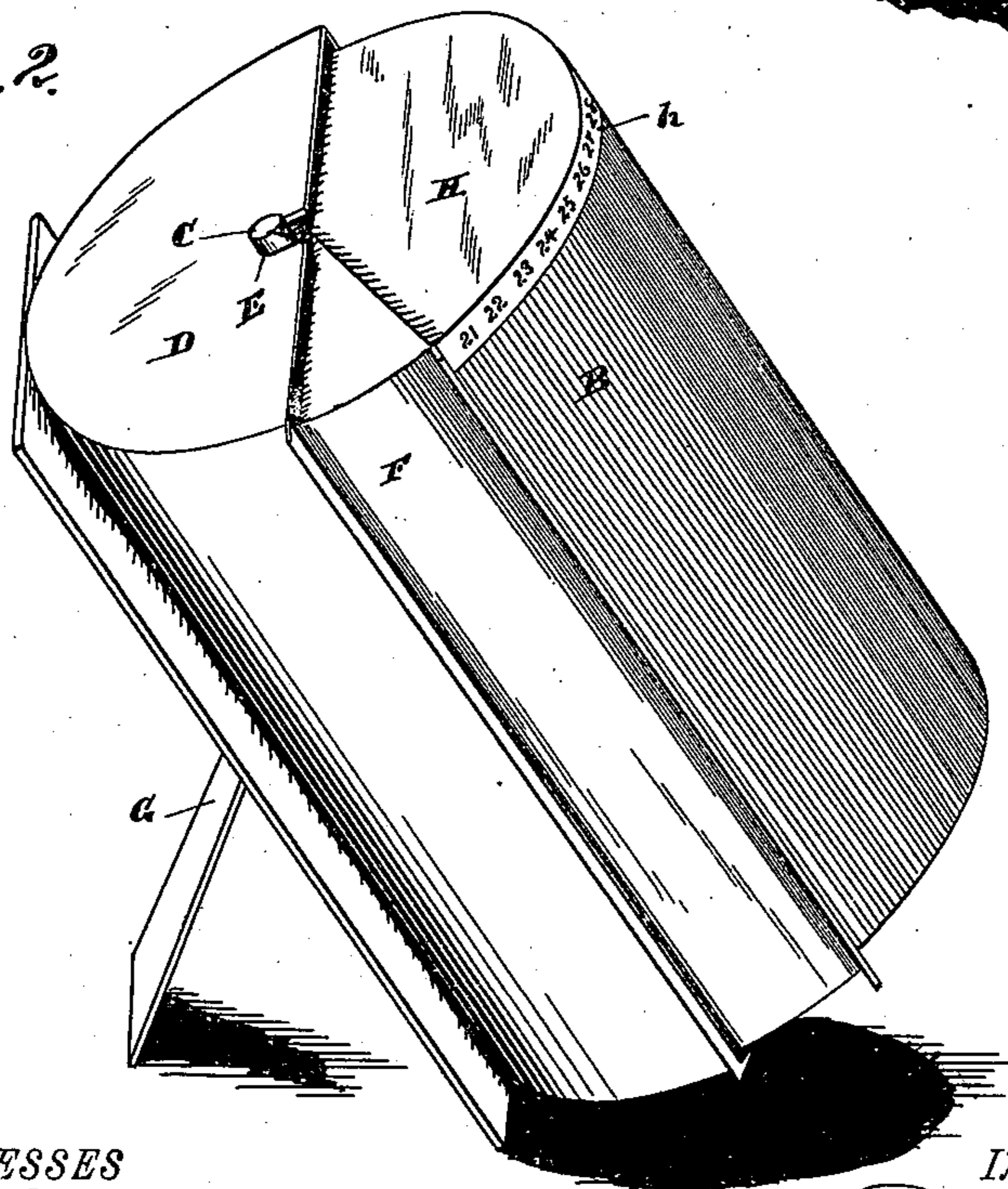


Fig. 1.

Fig. 2.



WITNESSES

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BOOK AND BINDING THEREOF.

SPECIFICATION forming part of Letters Patent No. 549,290, dated November 5, 1895.

Application filed December 7, 1894. Serial No. 531,145. (No model.)

To all whom it may concern:

Be it known that I, EUGENE GREGORY, a citizen of the United States, residing at Ann Arbor, county of Washtenaw, State of Michigan, have invented a certain new and useful Improvement in Books and the Binding Thereof; and I declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to books and book-binding, and has for its object the production of a book that is especially adapted for use as a book of reference, a book of tables, or a book of similar character in which there are a large number of pages, each one of which is small enough in form to be readily glanced over without changing the position of the reader or straining the eyes. While the principle upon which the book is formed may be employed in a book of any size or with leaves of any size, it is especially applicable to those of the kind referred to, in which there are upon each page one or two rather narrow columns, and each page is from ten to twelve inches in length, or even shorter, if desired.

Another feature of novelty in this book consists in its endless character—that is, the leaves are bound upon a backing in such a way that it is without beginning or end. When the book is opened out in place it is practically opened in the middle, and it is so arranged that the place of opening is always brought directly in front of the reader.

In the drawings, Figure 1 shows the book by itself. Fig. 2 shows it in connection with an inclosing case and with an index.

This book consists of a cylindrical or tubular support A, to which the edges of the leaves B are secured. The cylindrical support A may be either solid or hollow, as may be preferred, and consists, essentially, of a cylindrical surface upon which what would ordinarily be the back of a book is glued or otherwise secured. The book itself is preferably prepared for attachment to the support by tying it upon strings in the ordinary way, properly

trimming it, then bending it backward around the cylindrical support which has been prepared of the proper size, and securing it there either by gluing the back to the cylinder or by gluing it first to a strip of leather or paper which is glued to the cylinder. The part known as the “first signature” of the book is placed contiguous to the part known as the “last signature,” so that the complete production takes the form of a cylinder, the outer part of which is composed of the paper leaves of the book, each one of which projects out radially from the center.

In mounting the book for use practically, through the center of the cylinder is placed a rod C, which forms a journal or bearing upon which the book turns. A suitable framework D, provided with bearings, one of which is shown at E, receives the ends of the journal and upon the same journal may be swung a cover F. The framework D may be of any suitable shape, either as a half-cylinder or as a rectangular box, and preferably should be provided with a leg G, hinged to the back of it, so that it can be placed obliquely before the reader and support the book in an oblique position, the swinging-leg G acting to support the frame D in a manner similar to the support of an artist's easel. The swinging cover F should preferably be the half of a cylinder with the ends closed in, and it will thus swing over the front side of the book and together with the remaining part of the frame will close the book entirely in and protect it from dirt and dust.

On the journal E is a short cylinder H, equal in diameter to the larger diameter of the book, and around the perimeter *h* of this cylinder is placed an index indicating the contents of the book at that part of the book which is immediately contiguous and below it. In the figure the book is shown as though it contained tables and is open at page No. 36,120. This page would be indicated on the index by the figure 36 on the perimeter *h*, which would indicate closely the point at which to open the book.

There is practically no limit to the size of a book bound in this way. As it is balanced upon the axle, it can be readily turned and always brought to present to the reader that

part of it which he wishes to consult. On a cylinder two inches in diameter I have succeeded in arranging pages to the number of four thousand, and the size of the cylinder could be readily increased from two inches to two or three feet, if desired.

What I claim is—

1. In a book made in endless form, the combination of the sheets of paper comprising the leaves, a flexible medium to which the leaves are secured and a central holding cylinder around which the medium is bent, substantially as described.

2. In a book made in endless form, the combination of the sheets of paper comprising the leaves, strings to which the leaves are stitched, a central cylinder around which the

leaves secured on said strings are bent and secured, substantially as described.

3. The combination of a cylindrical endless book, a centrally supported axle, a supporting framework having a base, and means adapted to change the incline of the axle, substantially as described.

4. An endless book having a cylindrical support and leaves secured there-around, an axle, and an index cylinder secured to said axle, substantially as described.

In testimony whereof I sign this specification in the presence of two witnesses.

EUGENE GREGORY.

Witnesses:

CHARLES T. BURTON,
FRANCES CLOUGH.