

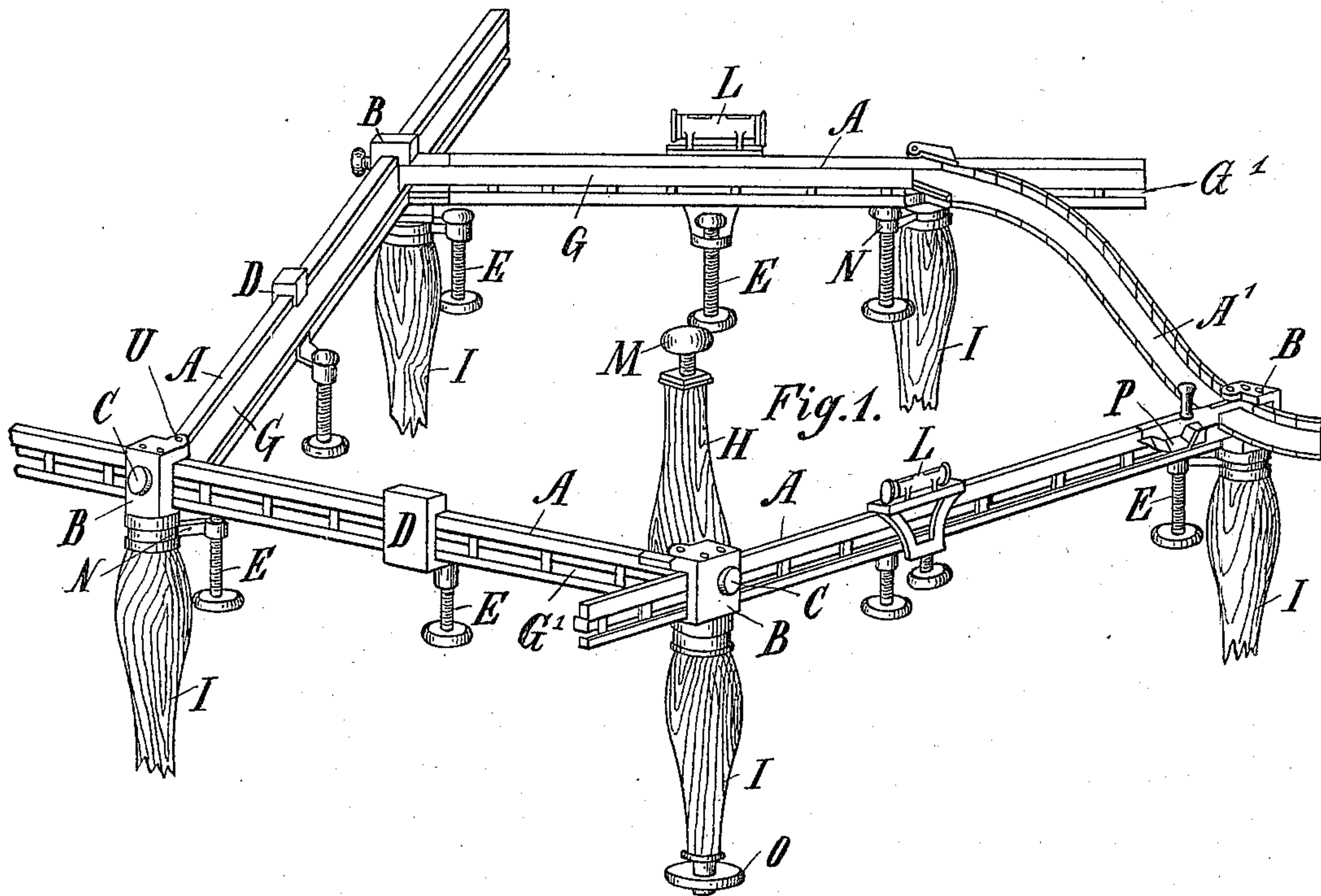
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3 Sheets—Sheet 1.

S. PUCHNER & K. SCHUBERT.  
ADJUSTABLE TABLE FOR ETCHING GLASS.

No. 600,888.

Patented Mar. 22, 1898.



Witnesses:  
L. M. Muller.  
M. A. Knowles.

Inventors:  
Sebastian Puchner and  
Karl Schubert  
By Edgar Tate & Co  
Attorneys.

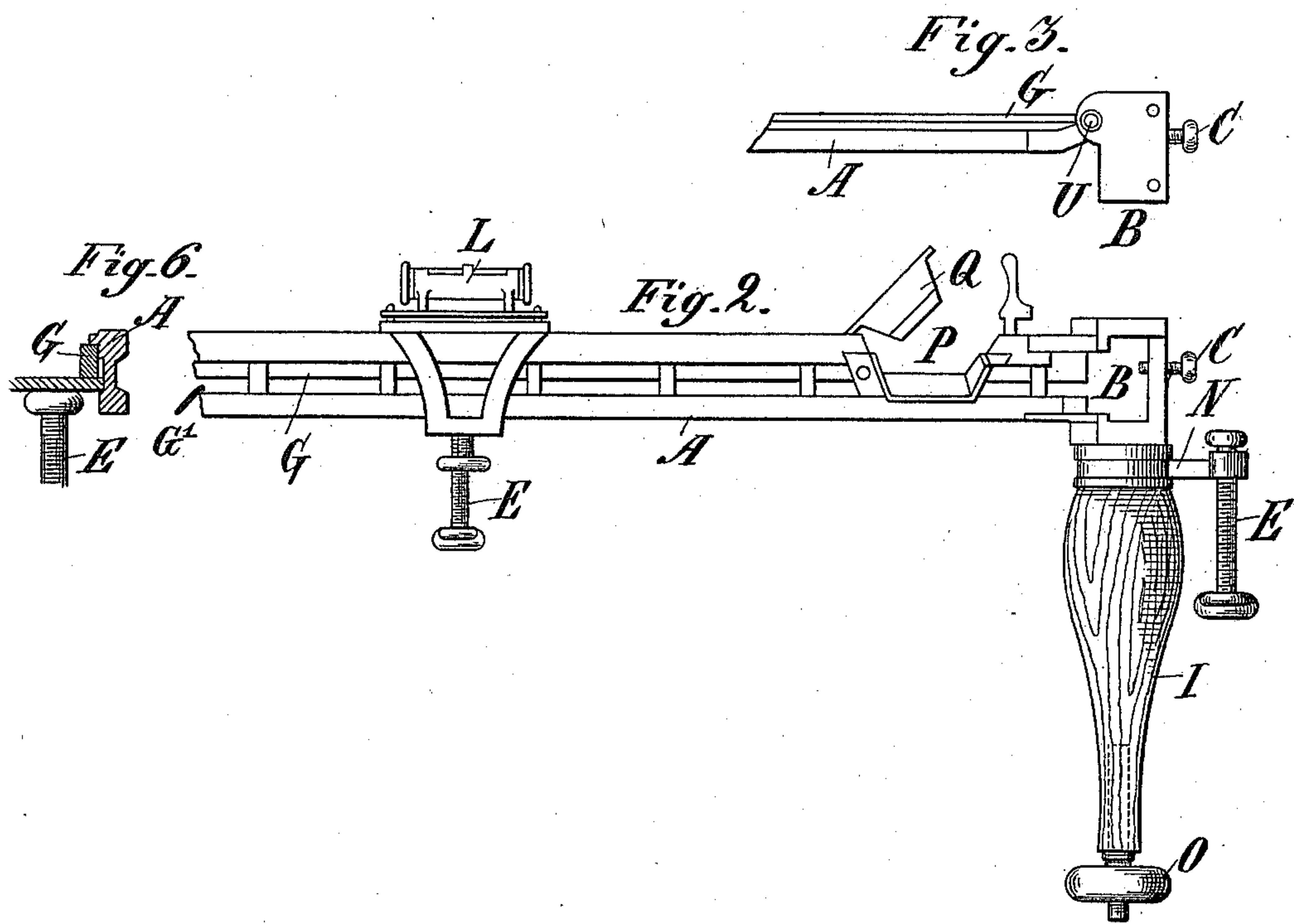
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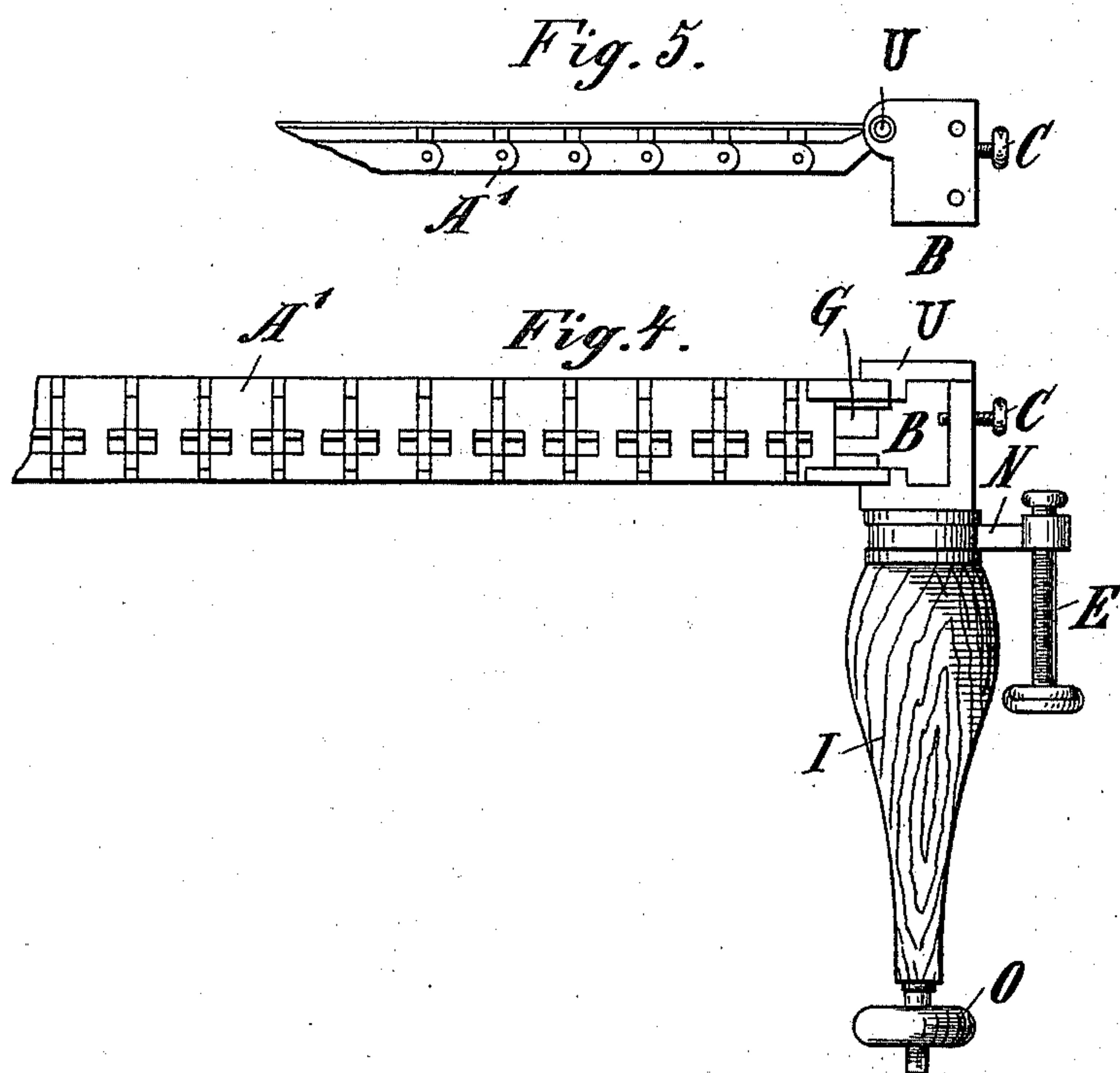
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# UNITED STATES PATENT OFFICE.

SEBASTIAN PUCHNER, OF WEIDEN, AND KARL SCHUBERT, OF AMBERG,  
GERMANY.

## ADJUSTABLE TABLE FOR ETCHING GLASS.

SPECIFICATION forming part of Letters Patent No. 600,888, dated March 22, 1898.

Application filed June 19, 1895. Serial No. 553,262. (No model.) Patented in Germany May 16, 1895, No. 85,629; in France May 29, 1895, No. 247,685; in England May 30, 1895, No. 10,741; in Hungary June 7, 1895, No. 2,897, and in Austria August 10, 1895, No. 45/2,841.

*To all whom it may concern:*

Be it known that we, SEBASTIAN PUCHNER, a resident of the city of Weiden, and KARL SCHUBERT, a resident of the city of Amberg; in the Kingdom of Bavaria, German Empire, subjects of the King of Bavaria, have invented certain new and useful Improvements in Adjustable Tables for Etching Glass, (for which we have received Letters Patent as follows: Germany, No. 85,629, dated May 16, 1895; England, No. 10,741, dated May 30, 1895; Austria, No. 45/2,841, dated August 10, 1895; Hungary, No. 2,897, dated June 7, 1895, and France, No. 247,685, dated May 29, 1895;) and we do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

Our invention relates to an adjustable table for etching purposes, and has for its object to provide a much cheaper and more convenient means than has hitherto existed for the purpose.

Hitherto in etching the surface of glass by means of acid it has been customary to set the edges or borders in wax or like material, and the time taken up in this operation alone is very considerable; but after the etching is completed it is often very difficult to remove this wax, and very frequently after said wax has been removed it is found that the acid has percolated through and spoiled the edges or borders of the glass object by making the same unlevel. In such cases it only remains to cut the edges level, and this very often results in the complete breakage of the article. Our adjustable table is calculated to remove these disadvantages entirely, since, while a glass object can be set in the table and removed from it in a few minutes, the edges or borders of said object are so packed during the operation that it is impossible for the acid to affect them.

We will now proceed to explain our invention with reference to the accompanying drawings, in which—

Figure 1 is an elevation of the table in perspective, showing the position for the recep-

tion of a glass plate having straight and round edges. Fig. 2 is a side elevation showing the rail and one of the legs in detail. Fig. 3 is a detail of the socket-head and the adjustable rail or cross-pieces hinged thereto. Fig. 4 is a front elevation of the leg of the table and one of the adjustable rails and the adjustable mechanism for said parts. Fig. 5 is a detail of the adjustable rail and the head B, with the adjusting-bolt C. Fig. 6 is a cross-section showing rail and rubber strip supported on screw rest or support.

The adjustable table consists of four or more cross-pieces or rails A and A', supported on legs I in such way that the former can be adjusted in both horizontal and vertical direction. Each leg I has attached to it by means of a hinge U one end of a cross-piece or rail A A', and for this purpose the said legs I are provided with a socket-head B, which serves the double purpose of point of attachment for one rail and rest for another. The free ends of the rails are inserted in the space within the socket-head and can there be adjusted in any horizontal position by means of a set-screw C, and the area inclosed by the table-frame can thus be made larger or smaller at will. For adjusting the frame in vertical direction the legs are provided with adjusting-screws O, spirit-levels L being also fixed in suitable positions.

The straight rails or cross-pieces A are grooved, and in the grooves G' are suitably fitted lengths of india-rubber G, whose width is a little short of that of the groove itself.

E are adjustable supporting-screws for the glass, and D and N the clamps or fastenings for said screws.

A' is an adjustable rail or cross-piece for use in etching objects whose edges or borders are not perfectly square. This rail differs from the straight or rigid ones in that it is composed of small links adapting themselves hinge-like to any shape.

The method of operating our invention is as follows: The table is first opened out to be adjusted to the area required, and the glass is then laid on the screw rests or supports E and, if necessary, on an additional



support M in the center. The frame is then closed in, and the edges or borders of the glass become packed in the grooves of the rails underneath the india-rubber G. When the glass is in position all around, the table is made rigid by means of the various set-screws and then brought to the proper level by means of the adjusting-screws O and the spirit-levels L. There will then be a layer of india-rubber projecting from the inside of the frame in such way that the acid is kept within its proper limits and clear of the borders or edges of the glass object. The glass is now ready to receive the acid, and as the former has been adjusted so as to be perfectly level a perfectly equal distribution of the latter is obtained.

For the purpose of removing the acid after the etching is completed one of the rails A is provided with a slot P, through which, on the table being raised at one side by means of one of the adjusting-screws O, all the acid runs off. The said slot is normally filled by a piece Q.

As a result of the operation it will be found that the edges or borders are perfect and of the same level all around, needing no cutting whatever. The work is also much more cleanly done, and this is of great importance in large and costly objects, such as mirrors.

After the etching operation is finished the table can again be used for painting or staining the glass.

Any shape of glass—that is, glass having square, round, or oval borders or edges—can

be treated in the same way. All that is necessary is to suitably combine straight or rigid and flexible cross-pieces or have them wholly flexible.

Having now explained our invention, what we claim, and desire to secure by Letters Patent, is—

1. In an etching-table, the combination of a series of legs, the socket-heads mounted on said legs, and provided with openings therein, a series of rails supported on said legs adjusting-screws O to adjust said legs vertically, the clamps D, N, and the screws E arranged in said clamps and adapted to support a glass, substantially as described.

2. In an etching-table, the combination of a series of legs, the socket-heads mounted on said legs, a series of rails adjustably supported on the legs each of said rails being provided with a groove G' on its inner face, and a rubber strip secured in said groove and adapted to bear upon the glass when it is supported on the table, substantially as described.

3. In an etching-table, comprising the legs, a series of rails mounted on said legs, a rail A' composed of links flexibly secured together, substantially as described.

In witness whereof we hereunto set our hands in presence of two witnesses.

SEBASTIAN PUCHNER.  
KARL SCHUBERT.

Witnesses:

JOH. SCHLESINGER,  
GG. NÜRNBERGER.