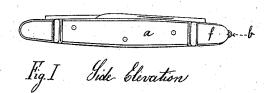
I. Shenard,

Glass Culter, No. 111, 269.

Patented Jan. 24, 1871.



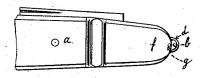
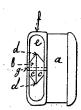


Fig. II Enlarged Side View



Witnesses

Witnesses

Inventor

Thelesphores Espenard

United States Patent

THELESPHORE SPÉNARD, OF COATICOOKE, CANADA.

Letters Patent No. 111,269, dated January 24, 1871.

IMPROVEMENT IN STEEL GLASS-CUTTERS AND KNIVES.

The Schedule referred to in these Letters Patent and making part of the same,

To all whom it may concern:

Be it known that I, THELESPHORE SPÉNARD, of the village of Coaticooke, in the district of St. Francis, in the Province of Quebec, Canada, jeweller, have invented a new and useful "Steel Glass-cutter Knife;" 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 drawing, where-

Figure I represents side elevation of knife with cut-

ter attached.

Figure II represents an enlarged section of knife with cutter.

Figure III represents an enlarged end view of knife with cutter attached.

The object of this invention is to produce a steel glass-cutter in connection with an ordinary pocketknife, and which will be simple, cheap, and effective.

In the cutting of glass a diamond is usually employed, but as this process necessitates a special instrument, it is frequently impossible on ordinary occasions for persons to avail themselves of its use.

Steel instruments for cutting glass have also been in use, but the same objection as to special instruments obtains. This will be removed by my invention, attached as it is, in a simple manner, to a common instrument in general use, like a pocket-knife.

This cutting steel is arranged in the form of a small circular disk or wheel, with its outer sides beveled to

a sharp cutting-edge.

A slot is provided in the metal end of the knife, into which the steel wheel is introduced, being held in place and revolving on an axle passing through the wheel into each side of the metal.

This cutting-wheel is made of finely-tempered steel. In the drawing similar letters of reference indicate corresponding parts.

a is the knife, of any of the ordinary forms in use;

b, the revolving steel for cutting the glass, with beveled edges c and sharp cutting-edges d.

e is the slot or recess cut out of the metal end f of the knife a, and

g, the axle on which the wheel revolves. The plan of operation is as follows:

The glass to be cut is placed on a firm level table, or bearing, and a straight-edge or other guide for the line of cutting placed in the required position on the The knife is then taken in the right hand and with the revolving steel wheel resting on the glass, and guided by the straight-edge, &c., is drawn firmly over the glass in the required direction, the sharp revolving edge of the cutter in contact with the glass, will operate like a diamond, and leave the glass in such a condition that it can be easily broken in the line traversed by the cutter. A leading advantage possessed by this form of cutter is that its entire circumference acts as a cutting point, and will therefore last much longer than the ordinary single-pointed cut-

What I claim as my invention, and wish secured. by Letters Patent, is-

A pocket or other cutting-knife, constructed with a revolving glass-cutter, substantially as described. THELESPHORE SPENARD.

Witnesses:

M. K. STONE, EDWIN VAUGHAN.