June 2, 1925.

A. DESTOMBES

1,540,462

PROTRACTING SCRIBER

Filed Jan. 30, 1920

2 Sheets-Sheet 1

Fig.1.

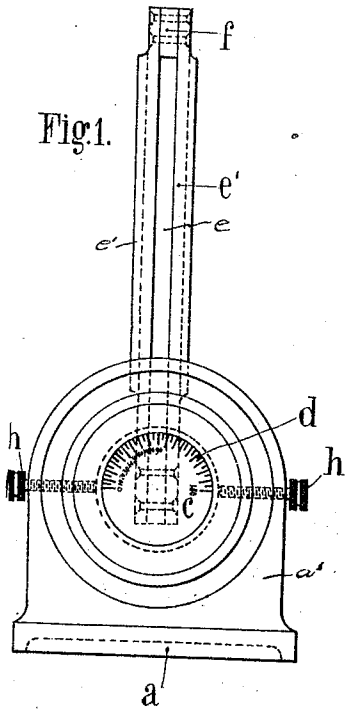


Fig.2.

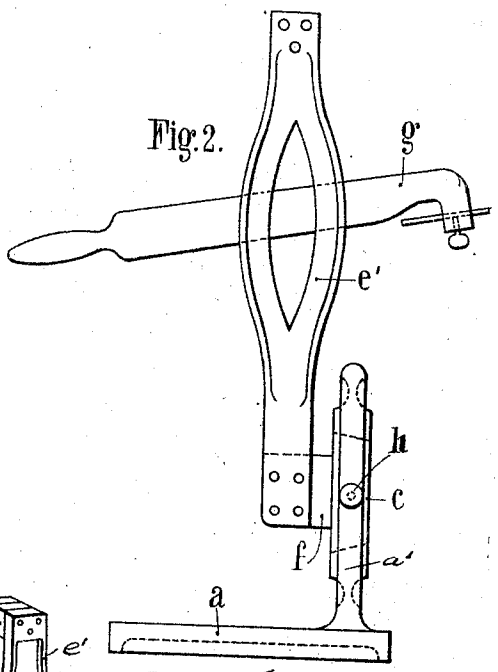
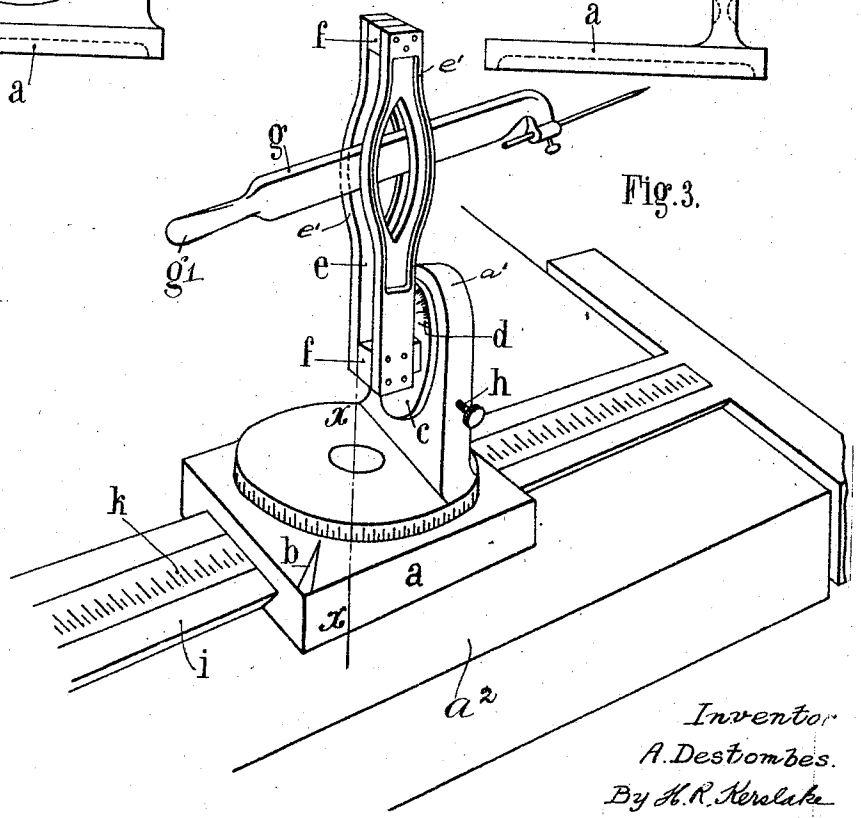


Fig.3.



Inventor
A. Destombes.
By H.R. Kerslake
Atty.

June 2, 1925.

1,540,462

A. DESTOMBES

PROTRACTING SCRIBER

Filed Jan. 30, 1920

2 Sheets-Sheet 2

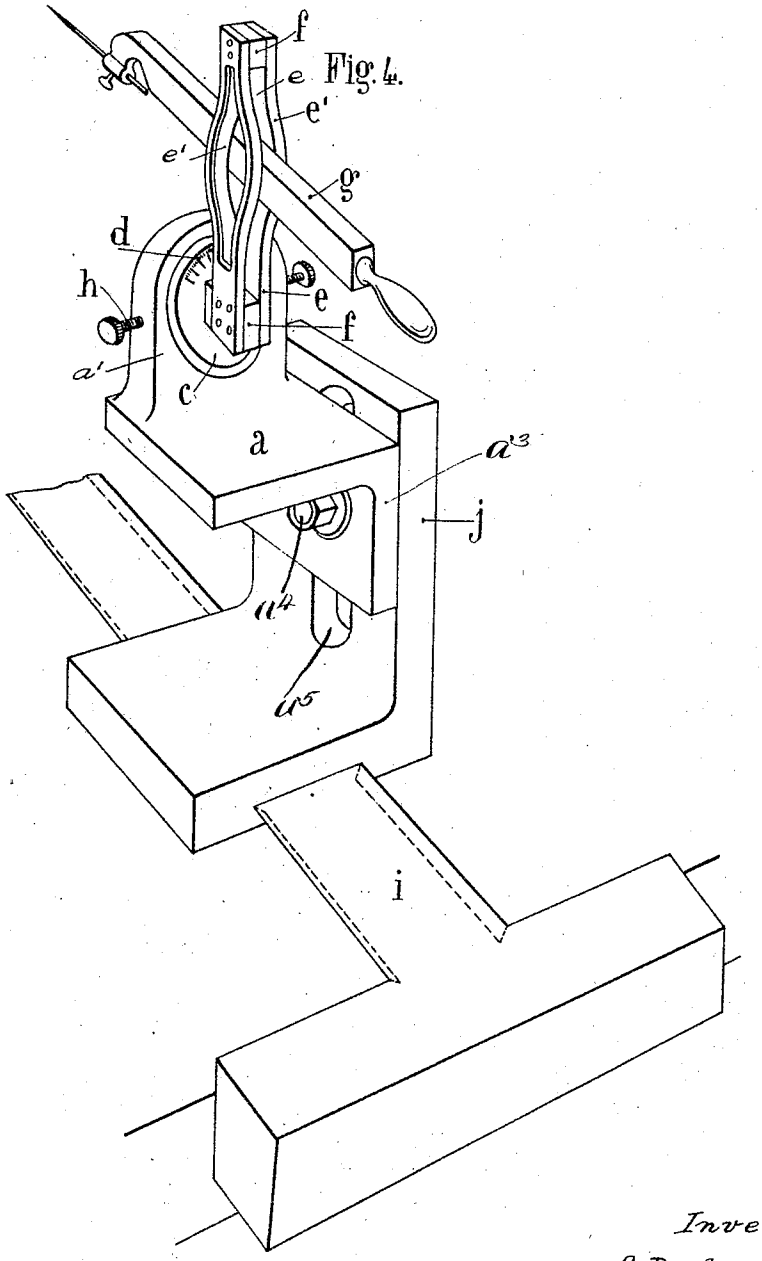


Fig. 4.

Inventor
A. Destombes
By H.R. Kerslake
Atty.

Patented June 2, 1925. 1,540,462

UNITED STATES PATENT OFFICE.

ANTOINE DESTOMBES, OF PARIS, FRANCE.

PROTRACTING SCRIBER.

Application filed January 30, 1920. Serial No. 355,142.

To all whom it may concern:

Be it known that I, ANTOINE DESTOMBES, a citizen of the French Republic, residing at Paris, France, have invented certain new and useful Improvements in Protracting Scribers, of which the following is a specification.

This invention has for its object a protracting scriber by means of which oblique and vertical lines can be drawn in such a manner as to enable the scribing of a workpiece to be effected wholly without the said workpiece having to be set up on three faces. The improved scriber serves also as a checking apparatus and as a protractor.

This invention consists also in the combination of the protracting scriber with a T-square; the protracting scriber being guided either directly along the blade of the T-square or through the intermediation of an adjustable support that allows of varying the height of the scriber above the scribing table.

An embodiment of this invention is illustrated by way of example in the accompanying drawings in which:—

Figs. 1 and 2 are respectively a front elevation and a side elevation of a suitable constructional form of the improved protracting scriber forming the subject matter of the invention.

Figs. 3 and 4 are perspective views illustrating respectively the combination of the improved scriber with a T-square, and the combination of the improved scriber with a T-square and a support capable of vertical adjustment.

The improved protracting scriber comprises essentially a base or socket member *a* serving as its bedplate and carrying a support *a'* at right angles to it. This support forms a bearing for a graduated rotary drum *d* the axis of the angular displacement of which is at right angles to the plane of the said support and consequently parallel to the supporting base of the scriber.

This rotary drum *d* carries a radial rod *e* that forms a guide by the combination of two parallel side members *e'* stayed together at their ends by spacing blocks *f*. In this guide is mounted the scribing point or tool holder *g* which can be set at any desired height and at any suitable angle relatively to the radial rod *e* that carries it.

The tool support *g* is held in the guide *e* by the friction of its lateral surfaces on the resilient arms of the guide. In other words, the tool support *g* is forced between the resilient arms of the guide *e;* the thrust which is exerted on the point at the moment of tracing is not sufficient to vary the position of the tool support. The turning or directing of this tool support *e* is effected by means of the handle with which it is provided at its end opposite the tracing point.

h are set screws for enabling the graduated drum *d* to be locked in position in its supporting bearing.

The arrangement is such that the scribing point or tool can be shifted by hand in a plane determined by the position of its supporting arm *e*, relatively to the bearing or base plane of the scriber, whilst the latter remains fixed relatively to the scribing table and to the workpiece that is being scribed.

Consequently by means of this apparatus any desired line parallel to or at right angles or oblique to the surface of the scribing table can be drawn along the surface of the workpiece without having to shift the latter, the drawing of the line at right angles and of the oblique lines being effected by moving the scribing tool holder *g* in the slot in the rod *e* which is turned suitably in a plane perpendicular to the bearing surface of the base *a* by pivoting around the axis of the rotating drum *c*.

The improved scriber may be used alone or in combination with a T-square.

By using the improved scriber combined with a T-square *i* it is possible to move the scribing point or tool parallel to an edge of the scribing table (Fig. 3).

Also by using a T-square having a vertically adjustable support *j* (Fig. 4), the horizontal pivoting axis of the drawing plane can be moved to any desired height and desired position for scribing the workpiece.

By using the T-square (with or without an adjustable head) and the improved scriber mounted on a base plate capable of pivoting in a horizontal plane (Fig. 3), it is possible to scribe in any plane which is oblique only to the scribing table, as well as in any plane which is also oblique to the edge of the scribing table that serves as the fixed base for the use of the T-square.

The socket member *a* is provided, at its

surface bearing on the tracing or scribing plate a^2, with a central groove which engages over the arm i of a T-square adapted to slide on the plate a^2. The thickness of this arm i is such that the socket member a bears on the upper surface of the plate a^2 and the arm i fitting closely in the groove of the socket or base member.

The socket or base member a (Fig. 4) is formed of a square member, whose vertical part a^3 is applied against the vertical surface j of a second square element whose horizontal part fits on the arm i of the T-square as explained for the arrangement of Fig. 3. A bolt a^4 passing through the part j into a vertical groove a^5 permits of rigidly uniting ths parts j and a^3. This bolt may serve as a pivotal axis for the gauge in a vertical plane. The bolt 4^a may occupy any position intermediate the ends of the vertical groove a^5.

An index b (Fig. 3) engraved on the upper face of the socket member a serves as a marker for the angular movements of the gauge about the vertical axis x—y—. The shoe or member a is not connected to the tracing plate a^2 but simply rests on this latter at the same time with the T-square i, so that the whole may slide on the tracing surface a^2.

The point support g is fastened resiliently between the arms e and, by means of its manipulating handle, it may be moved between the arms e in a great many positions in the vertical plane equidistant from these two arms, the friction being sufficient to hold the point support in the position desired for scribing.

Claims:

1. In a device of the character described, a socket member, a drum mounted for rotary movement in said socket member, a guide member carried by and projecting radially of said drum having resilient gripping portions, and a scribing point holder adjustably mounted directly in said resilient gripping portions of said guide, said resilient gripping portions exerting pressure on said holder whereby to frictionally retain the latter in adjusted position.

2. A device of the character described including a socket member, a drum mounted for rotatable adjustment in said socket member, a guide connected with and extending radially from one surface of the drum, said guide including spaced parallel resilient side members, a point support frictionally engaged between the resilient side members and a scribing point mounted in the support.

3. A device of the character described including a main support, means on said support for engaging one of the arms of a T-square permitting said support to be moved along said arm of the T-square, a secondary supporting member carried by the main support and having an upstanding portion provided with a transverse socket, a drum rotatably supported in the socket, a guide carried by one surface of the drum and extending therebeyond, and a scribing point support mounted in the guide.

4. A device of the character described including a socket member, a drum mounted for rotary adjustment in the socket member, means engaged with the socket member for rotatably supporting the drum, a guide carried by one face of the drum and extending radially therebeyond, said guide including spacing blocks one of which is connected to the drum, and a pair of resilient side members secured to and held in spaced relation by the blocks, a scribing point support frictionally engaged between the resilient side members and a scribing point adjustably mounted in the support.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ANTOINE DESTOMBES.

Witnesses:

LUCIEN MARNAE,

GEORGES BONNEIUL.