No. 833,598. PATENTED OCT. 16, 1906.

H. HANSEN.

GAGE.

APPLICATION FILED JUNE 16, 1906.

Fig. 1.

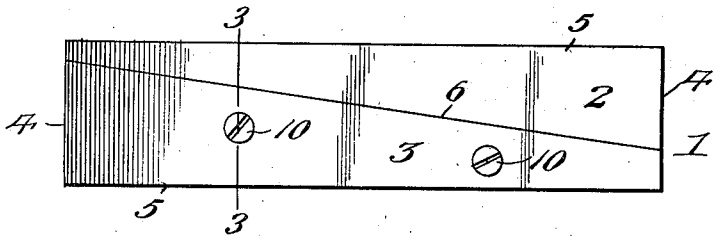


Fig. 2.

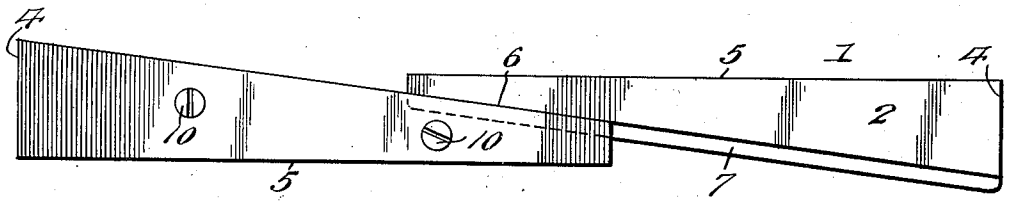
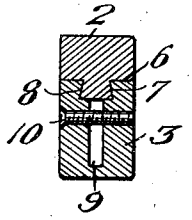


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

HANS HANSEN, OF ROCK ISLAND, ILLINOIS.

GAGE.

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Application filed June 16, 1906. Serial No. 322,090.

To all whom it may concern:

Be it known that I, HANS HANSEN, a citizen of the United States, residing at Rock Island, in the county of Rock Island and State of Illinois, have invented new and useful Improvements in Gages, of which the following is a specification.

The invention relates to an improvement in gages designed, primarily, for use in metal-working and constructed, primarily, for ease and accuracy of adjustment.

The main object of the present invention is the production of a gage of the wedge-parallel type wherein the gage sections or blocks have their gaging edges disposed and maintained at all times in parallel planes, the relative movement of the sections providing for adjusting the spaced relation of said gaging edges.

Another object of the present invention is the production of means whereby the gage-sections may be conveniently and accurately adjusted relative to each other and conveniently secured in adujsted position against possibility of accidental movement.

The invention will be described in the following specification, reference being had particularly to the accompanying drawings, in which—

Figure 1 is a view in side elevation of a gage constructed in accordance with my invention, the sections being shown in normal or closed position. Fig. 2 is a similar view with the sections shown in open position to reduce the gage below the normal. Fig. 3 is a transverse section on line 3 3 of Fig. 1, the binding-screw being shown in elevation.

Referring particularly to the drawings, wherein similar reference-numerals indicate like parts throughout the several views, my improved gage 1 is constructed of approximately duplicate blocks or sections 2 and 3. Each section is of approximately right-angle triangular formation having an end 4 and side face 5 at right angles to each other and an inclined edge or face 6. The inclined face of the one section, as 2, is formed throughout its length with a tenon 7, preferably dovetailed in cross-section, while the section 3 of the gage is formed on the inclined face with a correspondingly-shaped mortise 8, designed to slidably and accurately receive the tenon 7 and connect the sections for relative endwise movement, as clearly shown in Fig. 3. The section 3 is also formed throughout its length with a centrally-arranged channel 9, terminating near the gaging-surface 5 of the section and opening through the mortise 8. The channel 9 extends longitudinally of the section 3, opening through the end walls thereof, so that the section 3 is, in effect, composed of spaced side walls connected at their lower ends by a thin strip forming the gage-face of the sections. Binding-screws 10 are disposed transversely of the section 3, being arranged for threaded engagement with the walls of the section about midway of their height. The binding-screws, which are preferably though not necessarily two in number, are adapted under suitable operation to draw the walls of the section 2 toward each other with the effect to bind the walls of the mortise 8 snugly about the tenon of the section 2, and thereby secure said section in fixed relation to the section 3, as will be obvious.

The relative projections of the inclined faces 6 of the respective gage-sections are such that when said faces are in contact through engagement of the mortise and tenon described the side or gaging faces 5 of the respective blocks are in exact parallel relation, and as the inclined faces are arranged for relative contact in the adjustment of the sections it is obvious that said gaging-surfaces 5 will be maintained in parallel relation without regard to the adjustment of the sections.

In assembled or normal form, as shown in Fig. 1, the gage-sections together provide a rectangle divided on the approximate diagonal line and through the connection described are movable longitudinally relative to each other. It is apparent that such movement of the respective sections will cause the parallel or gaging surfaces 5 of the respective sections to approach or recede from each other relative to their normal positions, so that the gaging-surfaces may be thereby adjusted to dispose said surfaces the desired distance apart. After adjustment to set the gage the binding-screws 10 are tightened with the effect to secure the sections in adjusted relation.

It is to be particularly noted that the gaging-surfaces 5 are in parallel relation in the normal and in any adjusted position of the sections, so that the operator is thus provided with a gage having absolutely parallel gaging-surfaces which are capable of adjustment to increase or decrease the spaced relation of said surfaces. The end surfaces 5 of the respective sections are also in parallel re-

lation, so that these surfaces may be also utilized by suitable adjustment of the sections to provide a gage.

The gage as a whole is preferably constructed of metal, with the respective gaging-surfaces machined absolutely correct. It is to be understood, however, that the use of any desired material for the gages is contemplated and that I do not confine myself specifically to the means described for slidably connecting the sections.

Owing to the ease and rapidity of adjustment the gage described is capable of many and various uses, though particularly serviceable in metal-working.

Having thus described the invention, what is claimed as new is—

A gage comprising duplicate wedge-sections of approximately right-angled triangle form, one of the sections being formed on the inclined edge with a tenon extending throughout the whole length thereof, the other of said sections being formed on the inclined edge with a mortise to receive the tenon, the mortised section being also formed with a longitudinally-disposed centrally-arranged channel communication with the mortise, and a binding-screw engaging the respective walls of the channel-section, said screw passing transversely through the channel-section and lying flush with the surface thereof and whereby to avoid projection in the use of the gage in any position.

In testimony whereof I affix my signature in presence of two witnesses.

HANS HANSEN.

Witnesses:
D. R. McFarlane,
M. C. Rice.