

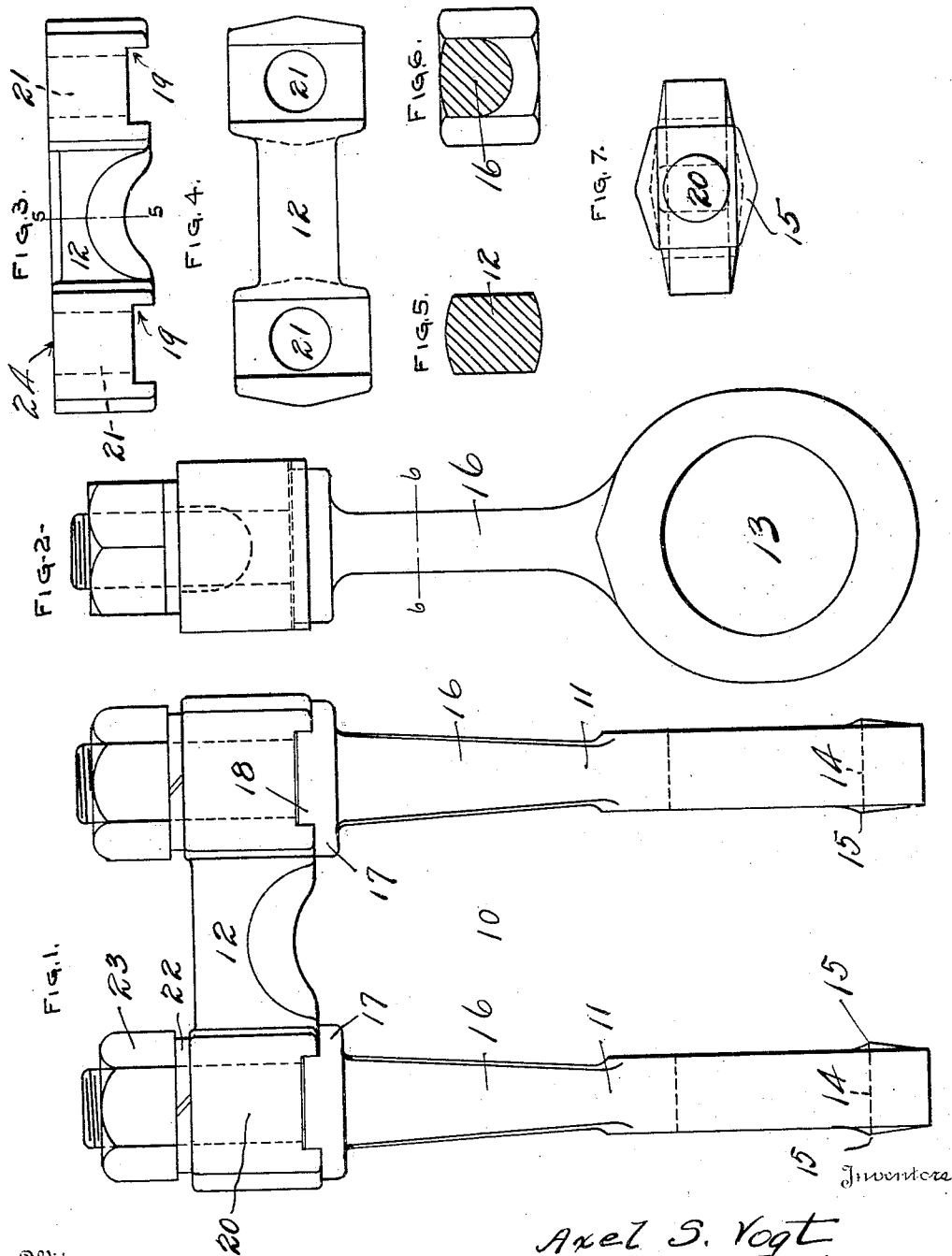
A. S. VOGT & C. E. BARBA.

SCALE.

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Patented July 31, 1917.

1,234,979.



Witnesses

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SCALE.

1,234,979.

Specification of Letters Patent.

Patented July 31, 1917.

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To all whom it may concern:

Be it known that we, AXEL SAMUEL VOGT, a subject of the King of Sweden, and CHARLES E. BARBA, a citizen of the United States, both residing at Altoona, in the county of Blair and State of Pennsylvania, have invented certain new and useful Improvements in Scales, of which the following is a specification.

This invention relates to scales, and particularly to those using a loop for transmitting proportionate loads from one scale beam to another by means of engaging pivots, and to this end this invention contemplates an improved loop having a plurality of pendent perforated legs, suitably secured to a cross beam so designed as to present an ample bearing face to the support which carries the same.

The primary object of this invention is to construct a loop of a plurality of parts which not only greatly facilitates the removal of beams, when such is necessary, but provides a very practical way of renewing the pivots when the same are affected.

Another object of this invention is to provide positive means of alining the pendent legs of the loop, so as to insure greater freedom of the bearing pivots as well as accuracy of the scales.

Another object of the invention is to provide means whereby the various stresses to which the loops are subjected are reduced to such that are easily calculated as simple tension and bending stresses.

A still further object of the invention is to provide a scale loop that is susceptible of being hardened sufficiently to resist the wear of the pivot points, thus obviating the necessity of inserting in the eye of the loop, a section of material for this purpose, which not only is difficult to maintain, but gives rise to inaccurate alinement of the pivot axis and hence an inaccurate scale.

With these and other objects in view, which will become more readily apparent as the nature of the invention is better understood, the same consists of the novel construction, combination and arrangement of parts as will hereinafter be fully pointed out, illustrated and claimed.

It will be quite readily understood that this invention is susceptible of some structural change and modification without departing from the spirit or scope of the invention, but a preferred and practical form

of the invention is shown in the accompanying drawings, in which;

Figure 1 is a front elevation of the improved loop, showing the manner of attaching the pendent legs to the transverse beam or top member.

Fig. 2 is a side elevation of the parts shown in Fig. 1.

Fig. 3 is a side elevational view of the top beam member, showing in detail the alinement recesses which are engaged by a cooperating ledge on the pendent element.

Fig. 4 is an inverted plan view of the parts shown in Fig. 3.

Fig. 5 is a cross section taken on the line 6-6 of Fig. 2.

Fig. 6 is a cross section taken on the line 5-5 of Fig. 3.

Fig. 7 is a top plan view of one of the pendent legs with the beam removed.

Like reference numerals refer to corresponding parts throughout the several figures of the drawings.

In carrying out this invention no change is contemplated in the usual form or construction of the scale beam or scale mechanism proper, and to this end we have constructed a beam loop designated in its entirety by the numeral 10, such that the same can readily be placed on a pair of scales equipped with the usual integral loop, after the removal of the same.

The loop 10 is constructed in three parts, viz; the pendent arms or legs 11 and the beam or yoke piece 12. The pendent arms 11 have the usual form of eye 13, with the knife edge engaging portion 14 being slightly extended on either side, as at 15 in order to provide additional bearing surface.

The shank 16 of the pendent legs is preferably made with a taper which merges into a shouldered portion 17, as shown clearly in Fig. 1 of the drawings.

The shouldered portion 17 is provided with an upstanding alinement ledge 18 which engages a cooperating recess 19 in the beam member 12. The pendent arms 11 are further provided with an extended cylindrical section 20, adapted to fit snugly in the opening 21 of the beam 12. The upper edge of the section 20 is threaded and is also provided with some form of lock washer 22 and nut 23, for drawing the parts together. The beam 12 is preferably made with a slight shoulder or boss 24 adjacent to the lock washer 22, for the purpose of facing

the same in order to facilitate fitting. The central portion of the beam 12 is preferably provided with a semi-cylindrical section, as shown in Fig. 6 of the drawings, this form of section being admirably adapted for the purpose intended and conforms to the section found in the usual integral loops. The pendent legs, as well as the beam members, are preferably made of chrome bearing steel in suitably constructed dies.

Having thus described our invention it is thought that the many advantages will be readily understood without further elaboration, and what we claim and desire to be secured by Letters Patent, is:—

1. A loop for scales comprising a beam member having openings at each end thereof, and recessed on one face adjacent each opening, pendent leg members having an eye at their lower ends, and formed at their upper ends to fit in said openings, said leg members also having a shoulder at the junction of the portion thereof which fits in the

beam openings with the body for interlocking with said recess and means for engaging the ends of said leg members projecting through the openings to clamp the same in position.

2. A loop for scale beams comprising a yoke piece having recesses, a plurality of parallel legs carried by said yoke piece and each having an eye at its lower end and a shoulder at its upper end, and an upstanding oblong ledge on said shoulder portion for interlocking with one of the recesses of the yoke piece, and means for holding the leg members to the yoke piece whereby the eyes of the leg members are maintained at right-angles to the long side thereof.

In testimony whereof we affix our signatures in presence of two witnesses.

AXEL S. VOGT.

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."