To all whom it may concern:

Be it known that I, PAUL R. HAHNEMANN, a citizen of the United States, residing at Southington, in the county of Hartford and State of Connecticut, have invented a new and useful Improvement in Gauges for Machines for Folding Sheet Metal; and I do hereby declare the following, when taken in connection with the accompanying drawings and the characters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this application, and represent, in—

Figure 1 a perspective view of my improved gauge.

Fig. 2 a view thereof in longitudinal section on the line 2—2 of Fig. 1.

Fig. 3 a view thereof in transverse section on the line 3—3 of Fig. 1.

Fig. 4 a detached, perspective view of one of the perforated steel gauge-teeth.

My invention relates to an improvement in gauges, designed for machines for folding sheet-metal, of the type shown and described in United States Patent No. 314,311, granted March 24, 1885, to The Peck, Stow & Wilcox Company, on the application of William J. Bayrer, the object being to provide an efficient gauge of the character described, constructed with particular reference to resisting wear in use and to rigidity, whereby it markedly increases the accuracy of the product turned out by the machine.

With these ends in view, my invention consists in a gauge consisting of a cast-metal body and a series of independently-formed hardened teeth having their inner ends embedded in the said body when the same is cast, and perforated for the flowage of the metal thereof through them, whereby they are anchored in place, and the continuity of the cast-metal maintained through the whole series of teeth.

In carrying out my invention, as herein shown, I employ a series of steel gauge-teeth having their inner ends formed with transverse perforations. A suitable number of such teeth, equally spaced apart, are installed in the mold in which the gauge-body is cast, at which time the fluid metal flows through the perforations of the teeth, and not only firmly anchors them in place, but maintains the continuity of the metal from one end of the front bar of the gauge-body to the other. After the inner ends of the teeth have thus been cast into the gauge-body, the forwardly-projecting ends of the teeth are hardened in any suitable manner and then ground to a gauge, whereby they are made so hard as to effectually resist the cutting action of the sharp edges of sheet-metal shoved against them and so gauged preparatory to being folded in the machine. Therefore, a machine provided with my improved gauge, with hardened teeth cast into its body, may be depended upon for a degree of accuracy throughout the life of the machine far above a machine in which the gauge-teeth are cast integral with the body and of the same material, necessitating the frequent truing up of the teeth and the ultimate replacement of the gauges, whereas, under my invention, the gauge requires no such attention.

I am aware that anchoring of inserts in cast-metal bodies by flowing the molten metal through openings in them is old and do not claim that idea broadly, but only as applied to the new article of manufacture herein claimed.

I claim:

As a new article of manufacture, a unitary, removable gauge for sheet-metal folding machines, comprising a body and a series of independently-formed teeth provided at their inner ends with perforations and having their said ends permanently and rigidly united with the said body by integral portions thereof extending through the said perforations.

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

PAUL R. HAHNEMANN.

Witnesses:
ROBERT R. PRATT,
CHARLES T. MOSHIER.