

## American Steam Gauge Co., Boston.

tend to improve, on the whole, an instrument whose principle has always been of undoubted correctness.

In calling attention to the features of this instrument, we prefer to do so subject to all amenities of business courtesy, leaving our products to speak for themselves, and others to do the same; but, in justice to ourselves and our instrument, we shall not allow to pass certain representations published by the makers of rival instruments.

In the pamphlet issued in behalf of the Tabor Indicator certain statements are made as showing the relative performances and relative weights of moving parts of both instruments. To these statements we will simply state, the matter of relative performances was not done as a public test, and cannot be taken as a basis of comparison. The table of comparative weights was deducted by comparison with the old-style Thompson Indicator, and should not be considered any comparison with the Thompson Improved Indicator as now made.

In the circular issued by the makers of the Crosby Indicator, certain statements are made, and diagrams shown, tending to depreciate the efficiency of the paper-cylinder spring of the Thompson Indicator.

The machine used to produce the diagrams referred to is one of very questionable correctness, and, wherever used in public, has left an uncertainty, amounting, in fact, to a doubt.

The conditions of a test conducted in private can never be considered fair representations of the competing instruments; and, to determine to the satisfaction of all parties interested, *we herewith challenge the makers of all other indicators to an open and public test, to determine the efficiency of the different instruments.*

In the Crosby Indicator, the paper drum spring is a spiral spring; the advantages claimed for same over the coil spring, producing, briefly stated, a "uniform stress on the cord" throughout the stroke.

In order to have this, the force of the spring should be least when the inertia of the drum has to be overcome by the cord in opposition to the force of the spring, and greatest when the inertia is to be overcome by the spring.

But, admitting that it is possible to secure nearly uniform stress on the cord in a given case, it will be evident, that, to secure that