

25, 50 and even 75 per cent. of those sent us. As a rule, these are not rejected without receiving double the care and time required by the large majority of those to which certificates are accorded.

“When there is taken into account the large percentage which the cost of certification adds to the manufacturer’s prices, it is not to be wondered at that when he has succeeded in continuously producing, for a season, instruments with few and uniform corrections, he should point to these conditions as justifying his customers in accepting his instruments without other certification than his own. In those cases of this sort which have come under our observation, we have noticed that apparently the workman, when he no longer has occasion to expect his work to be traversed by a disinterested authority, soon relaxes his efforts at an accuracy which is hardly yet fully appreciated by the ultimate consumer, and his instruments, when they come to us from his customers, are not quite up to the standard maintained when he was continuously, or at short intervals, submitting them to such test: possibly he is not making due allowance for his changing standards.

“It may not be out of place to again invite the attention of our public to some points in the construction of registering clinical thermometers, which are frequently overlooked by makers and users of these instruments.

“In those forms where the index is a short column of mercury—one-third to one-half an inch long—separated from the rest of the mercury by a small bubble of air, the index is often lost by being thrown down into the bulb, the bubble escaping into the attenuated atmosphere of the tube, and when the index is restored the separating bubble is not likely to be of the same dimensions, and the temperature indications will not be the same as with the former bubble. The difference in the lengths of the tube occupied by the old and new bubbles will account, approximately, for the difference in the readings. The bubble should always be as small as is consistent with its function of separating the columns of mercury. The tube should extend sufficiently beyond the maximum readings required, that the