HOW A WATCH IS MADE TO MEET THE CONDITIONS OF EVERYDAY USE

THE problem of accuracy in a watch would be greatly simplified if it were to remain in one position and at a constant temperature all the time. But a watch must keep good time in varying positions in which it is liable to be placed in ordinary service, and must also run true in the cold of winter and the heat of summer. Position and temperature seriously affect the accuracy of a watch unless precautions are taken.

To offset the variation caused by heat and cold the balance wheel of every Hamilton Watch is built of an outer rim of brass and an inner rim of steel, fused together. Thus is the unequal expansion of these metals made use of to scientifically compensate the action of one by the opposite action of the other.

Time compensation is further supplied by tiny timing screws mounted in the rim of the balance wheel. All Hamiltons are adjusted to cold and heat variations, these adjustments being made in a refrigerator at a temperature of 34 degrees Fahrenheit, and thence to a hot box at 100 degrees Fahrenheit.

When accurate under both conditions, Hamilton Watches are next adjusted to isochronism. This means that the
balance is so regulated that it will not run one bit faster immediately after winding than twenty-four hours later.

This delicate adjustment consists of regulating the stroke of the balance wheel in such a way that the faster the wheel moves the longer the stroke and the slower it moves, the shorter the stroke.

A watch is at one time or another in any one of the following five positions: (1) dial up, or flat on its back; (2) back up, or flat on its face; (3) stem up, or natural position; (4) 3 o’clock up, or as the watch would be if tipped to the left; (5) 9 o’clock up, or as the watch would be if tipped to the right.

On account of the minuteness of adjustments, watch making is a far more difficult art than clockmaking. A ship chronometer, the best timekeeper known, is adjusted to the dial up position only. In view of this fact it is significant that hundreds of jewelers and expert repairmen use a Hamilton Watch as a chronometer.
Accuracy of this kind has caused the Hamilton to be much sought after by men and women who prize timekeeping qualities in a watch.

Yet, due to the extraordinary care that is taken in the production of each Hamilton, it will never be a watch that you will see everywhere. It will always possess an exclusiveness peculiar to precise mechanical instruments of the very highest grade.

Only from four to five hundred Hamiltons are made each day. This is all that over nine hundred master watchmakers in the Hamilton factory can produce.

But this limited output is at the same time a safeguard. It *insures* the quality of the Hamilton Watch that you purchase, and enables the Hamilton Watch Company to give a broad guarantee with every watch sold.

When you buy a Hamilton you can do so with the profound assurance that you are buying a watch that will, with proper care, give you accurate time for long years to come.