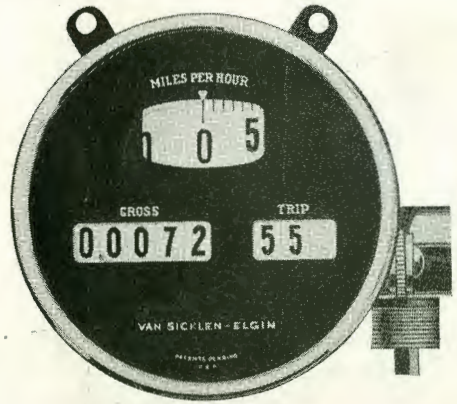
Ford owners who have admired the principles of their construction, their accuracy, legibility and refined appearance on other, higher-priced cars, will welcome the announcement that prompt delivery of the following Ford types can now be had.



Bracket Type

The Bracket Type

For Ford Cars

Like all other Van Sicklen Speedmeters, is made by skilled watchmakers trained to produce timepieces that are the world's standard for Accuracy and Service. The black-face dial and clean-cut letters are clear and legible. The finish conforms perfectly to the Ford standard. A strictly high-class instrument that can be depended upon.

Price, $12.00

Shield Type

The Shield Type

For Ford Cars

as illustrated, is an almost indispensable adjunct to the quality equipment of the Ford car of today.

No speed-recording instrument can give a better account of itself than the Van Sicklen. The Shield Type instrument is the same as the Bracket Type, with the exception of the mounting, which presents a handsomer, more finished appearance.

Price, $13.50

Shield Type With Clock and Dash Light

Combination Shield Type

For Ford Cars

This instrument combines several desirable features, exclusive with Van Sicklen, which have been exceptionally popular with Ford owners.

The general construction is the same as on others of our Ford Speedmeters. The addition of the graceful, elongated Shield base, however, splendidly provides for a Dash Lamp and Clock as well as for the Speedmeter Dial.

Price, $17.50

If your Dealer or Garage Man is not yet prepared to make deliveries of this Type of Van Sicklen Speedmeter—Send us his Name and Address and we will see that your needs are properly and promptly provided for.

THE VAN SICKLEN COMPANY, ELGIN, ILLINOIS

Van Sicklen Speedmeters

Built Like an Elgin Watch -by Elgin Watchmakers

Van Sicklen Speedmeters

are Masterpieces of Accuracy
Elegance and Service

Van Sicklen Speedmeters

Description

The Basic Principle

Into this world of speed has come a new invention, a real invention, involving an absolute basic principle, as efficient as it is simple—the Van Sicklen Speedmeter.

T. C. Prouty, who conceived this device, had in view two prime objects:

The absolutely accurate measurement of the speed of automobiles. The reduction of a speed-measuring instrument to its very lowest possible commercial denominator.

To the average person it would seem that the inventor of the Van Sicklen Speedmeter possessed a vivid imagination coupled with a thorough understanding of certain scientific facts and a marvelous mechanical bent of mind.

Briefly, the Van Sicklen Speedmeter is an instrument which calibrates an air current, and translates the result into miles-per-hour.

Imagine the workings of the old-fashioned hour glass—that simple device used by our forefathers for measuring time.

By inverting the hour glass the tiny grains of sand in the upper receptacle are borne downward by the pull of gravity through the aperture between the two compartments. The size of this aperture is calibrated to allow a

certain number of grains of sand to pass through in a given time, thus requiring a given number of minutes to elapse before the entire supply of sand passes from the upper cup into the lower one.

With the operation of the old-fashioned hour glass in mind, it is not difficult to understand the principle involved in the working of the Van Sicklen

FIGURE 1—PHANTOM VIEW

Speedmeter. Change in your mind's eye the grains of sand to tiny air particles, and you will have a picture of the invisible factor directly involved in the basic principle of the Van Sicklen Speedmeter.

For, as is commonly known, the air is made up of minute particles, each unit as separate and distinct from its fellows as are the sand grains, although not visible to the eye nor recognizable by any of the human senses.

But you cannot fully grasp the operation of this instrument unless you visualize all the parts of its construction. (See illustration Figure 1.) Fortunately, they are few and simple.

The Mechanism

The Van Sicklen Speedmeter consists of but three factors, vital in its operation. There is an air-circulator consisting of two elongated gears of alu-

minum, enmeshed and revolving in opposite directions. (See illustration Figure 3.) This circulator receives its power from a rotating flexible shaft, thus giving a positive drive the moment the car is placed in motion.

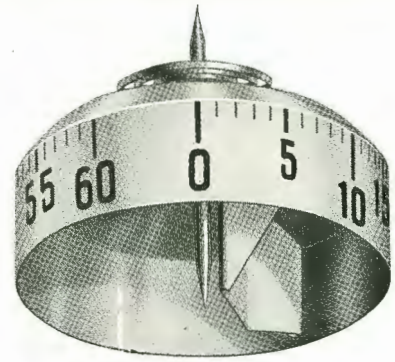


FIGURE 2—SPEED DIAL

The air-circulator is located in the head of the instrument, housed in a chamber in which there are two openings, one from the outside and away from which the gears rotate, and the other leading into a second chamber in which is pivoted a cup-shaped disk fitted on the inside with a light strip of metal which converts the pivoted part into a simple "vane," similar in operation to the ordinary "weather vane." (See illustration Figure 2.) As the circulator revolves, the air which occupies the grooves in the gears is forced out by the enmeshment of the oncoming teeth. Unable to return to whence they came, and being forced ahead by the continual arrival of more, the air particles pass through the opening into the dial chamber as a part of the current of air thus generated. (See illustration Figure 4.) Despite the fact that this current of air is imperceptible to the most delicate human senses even when the instrument records its maximum speed, the movement of the air particles is sufficient to rotate the cup-shaped dial. (See illustration Figure 2.)

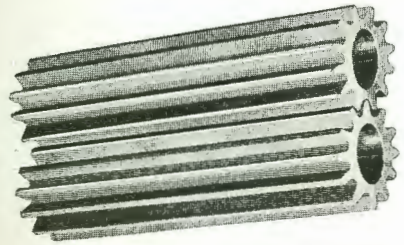


FIGURE 3—AIR CIRCULATING GEARS

FIGURE 4—AIR CUP AND CALIBRATING RING

The Calibrating Disk

In the dial chamber lies the basic secret of the instrument—the calibrating disk (See illustration Figure 4.) It is apparent that the size of the aper-

ture through which the air particles pass must be varied throughout all of the speeds maintained by the instrument. In other words, calibrated to allow the required number of air particles to pass through in a given time, as does the sand in the hour glass. The size of this opening is calibrated by the position of the vane in the rotary dial. (See illustration Figure 1.) The markings on the outside of the dial translate the position of the dial into miles-per-hour. Thus the instrument is calibrated for every division on the dial, and is the only speedmeter which can be calibrated correctly throughout all of the speeds.

Accuracy Test

Today the Van Sicklen Speedmeter stands as the only instrument which indicates speed-per-hour on a scientifically correct basis. In fact, our own instruments are the only ones upon which we can depend for the shop tests, and in no other speed indicator manufacturing plant is the variation held up to such a high standard as in the factory where the Van Sicklen Speedmeter is made—THE ELGIN NATIONAL WATCH COMPANY plant.

To those who have a practical knowledge of the operating principles of other speed-recording instruments, the fact that the Van Sicklen Speedmeter is a product which has been reduced to the lowest possible commercial denominator carries peculiar significance.

Simplicity

For, in the make-up of these instruments there are virtually but three moving parts—the two gears in the air-circulator and the dial. Friction has been reduced to a minimum. The dial is pivoted in jewels of a virtually indestructible nature. The air-circulator gears are subjected to no strain and are so designed as to enmesh and operate without wear.

The Odometer

The mechanism of this instrument represents an improvement on all known methods. The odometer, which registers trip and total mileage, contains certain mechanical improvements which materially aid its operation and

at the same time increase the legibility of the figures fully 100 per cent. (See illustration Figure 1.) All spur gears utilized in revolving the odometer wheels are fitted on the interior of the wheels themselves, and are of the Geneva stop type, thus making possible figures fully twice as large as those used on any other speedmeter odometer. The trip odometer reset wheel requires the use of but one finger while the mileage may be altered in either direction to correspond with route map figures. The reset device requires no side movement, and is constructed so as to eliminate the necessity of any locking arrangement.

The Transmission Drive

Another form of speedmeter drive preferred by some automobile manufacturers consists of a permanent set of gears installed inside of the transmission, gear ratios being based on transmission shaft revolutions. A flexible shaft connection is made from a member which projects through the top or side of the transmission case.

The Wire Belt Drive

A positive wire belt drive, as positive as a set of gears, has been produced by means of two grooved pulleys. Every revolution of the wheels gives the required number of revolutions to the driven pulley. The driving member may be attached to the hub of the universal joint or to the universal housing.

Universal Joint Gear Drive

We also provide the conventional gear and fibre pinion drive, applied direct to universal, and driving through a swivel joint.

The Front Wheel Drive

When the cardan shaft is encased or the transmission is combined with the differential, a front wheel drive may be provided. This drive consists of the customary bracket and fibre pinion gear enmeshed with a large metal gear attached to a front wheel.

Durability and Legibility

To the perfect workmanship and unexcelled quality of the material which goes into the making of the Van Sicklen Speedmeter is due, to a large extent, the excellent outward appearance of this instrument. Legibility is the keynote of the construction—for the Van Sicklen Speedmeter may be read as easily from the rear seat of a seven-passenger motor car as from the driver's seat. It is finished perfectly, the case being steel, coated with a heavy black enamel. The dial and the odometer figures are all lithographed directly upon these parts. In fact, this is the only instrument so constructed in this particular.

As to the merits of the instrument in operation:

The Van Sicklen Speedmeter is not affected in operation or appearance by climatical changes. Heat, cold, altitude and varying degrees of humidity have absolutely no effect upon the perfect operation of this instrument. Vibration of the most violent sort causes no fluctuation in its indication. Its readings always are steady—no fluctuations ever occur.

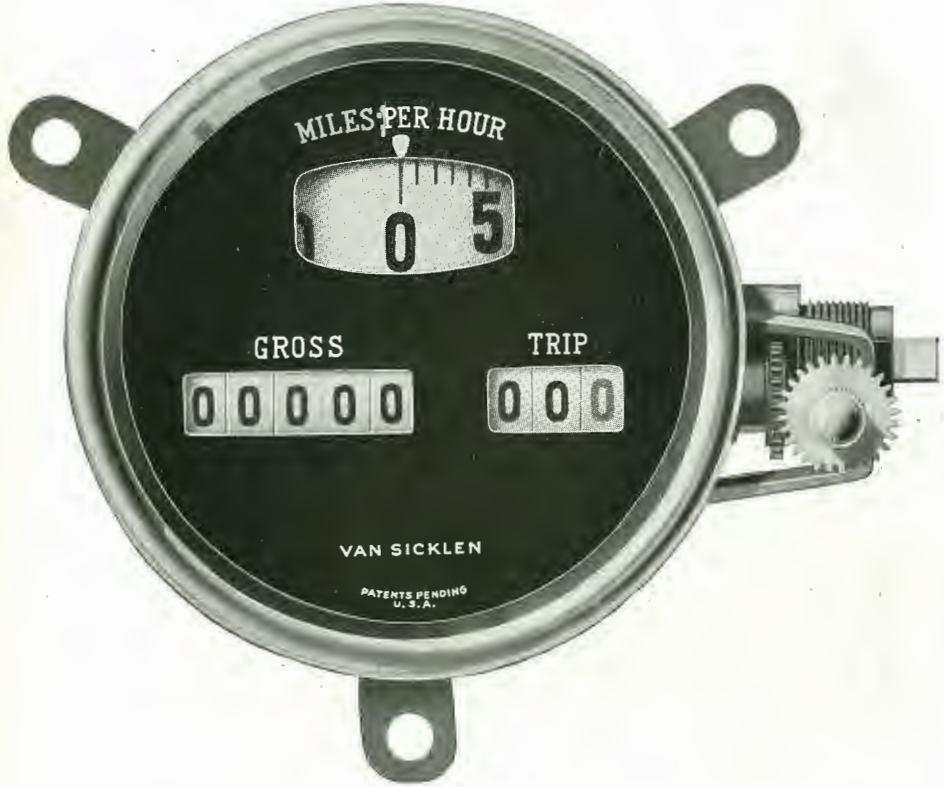
FLUSH TYPE, BLACK FACE NICKLE OR BLACK BEZEL

Built Like an Elgin Watch by Elgin Watchmakers

It is built to work correctly. Also it is built to live, for behind it, in its making, there is a reputation of more than half a century of instrument building of the most delicate, most conscientious kind—the sort of instrument building which has made the Elgin National Watch Company the monarch of its field. For the Van Sicklen Speedmeter is made by the Elgin National Watch Company in its mammoth plant, the largest of its kind in the world—at Elgin, Illinois.

FLUSH TYPE, KNURLED RESET, BLACK FACE, NICKLE OR BLACK BEZEL

Acres of the most modern machinery for the making of scientifically perfect parts are available to insure the absolute accuracy of this instrument. The same skill which made the Elgin watch "the universal watch" is making the Van Sicklen Speedmeter the speed indicator of Motordom. It is made non-adjustable and will require no recalibration.



FLUSH TYPE FOR MOUNTING THROUGH INSTRUMENT BOARD, NICKEL BEZEL

Service

Practically every sales agency representing the manufacturers who regularly equip with Van Sicklen Speedmeters is provided by us with a supply of such parts as may, through accident, wear or imperfections, require replacement, thus insuring "on-the-spot" service to the owner, who may know that, by this system, there is a "Service Station" in nearly every town where his make of car is sold. We are also establishing general "Service Stations" in all principal cities. All "Service Stations" are authorized to make adjustments provided for under our guarantee. However, if desired, adjustments will be made promptly by the Van Sicklen Company.