

Oct. 7, 1930.

H. ROTHAUER
OIL CHANGE INDICATOR
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1,777,897

FIG. 1.

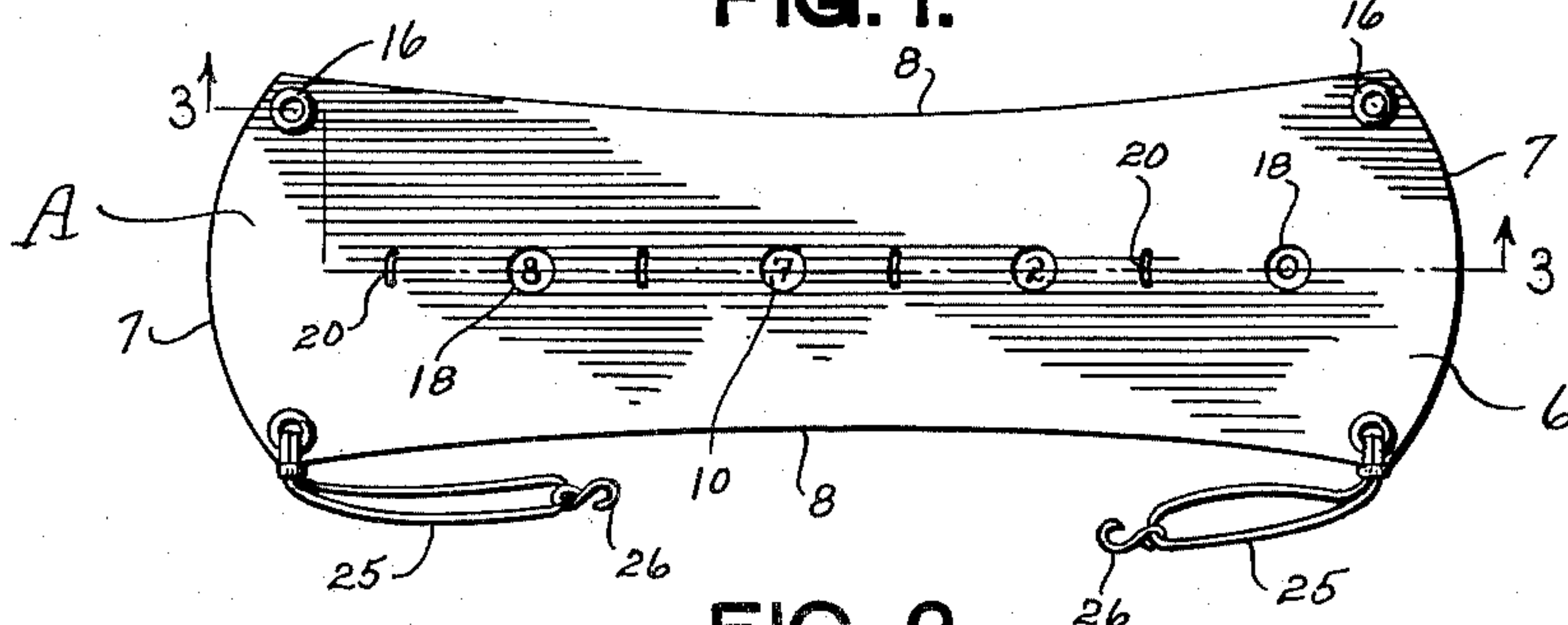


FIG. 2.

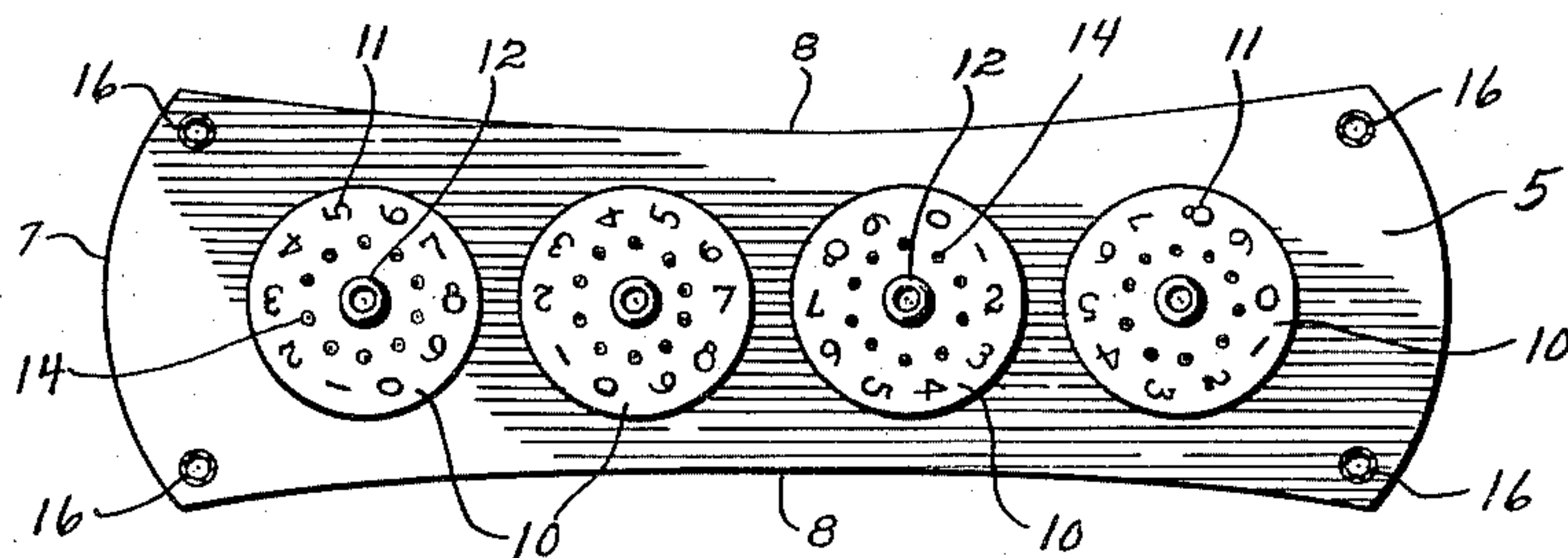


FIG. 3.

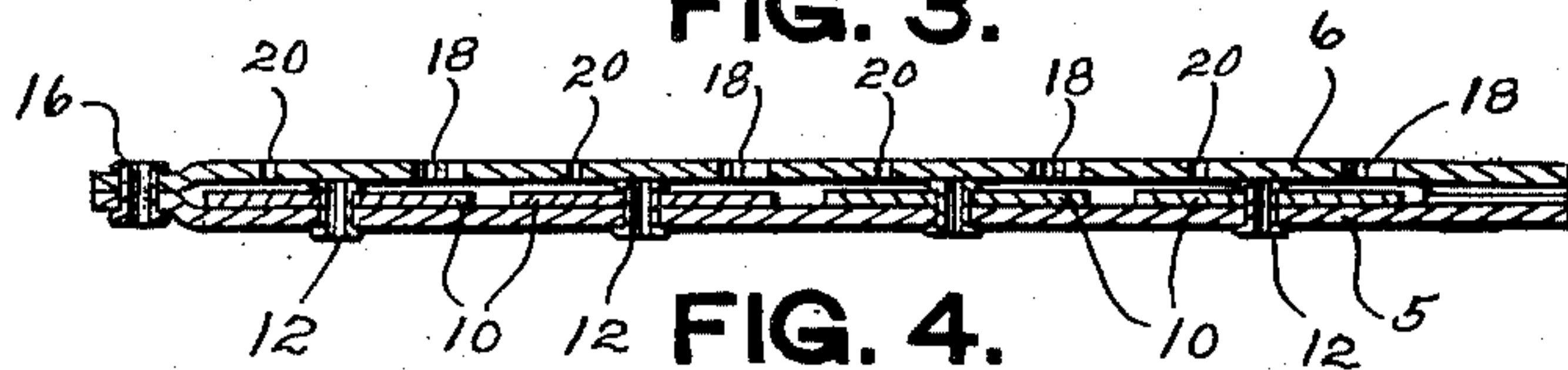


FIG. 4.

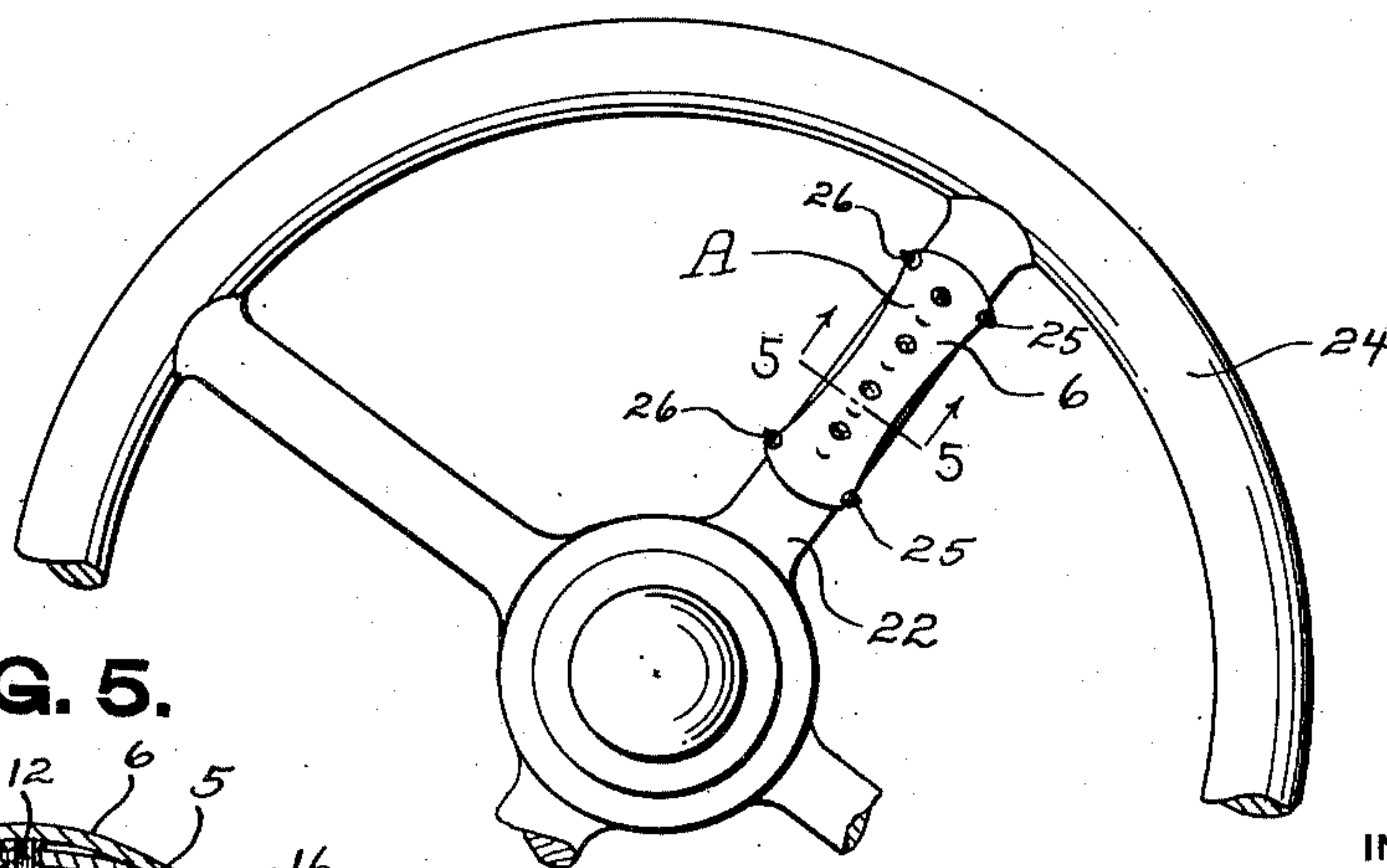
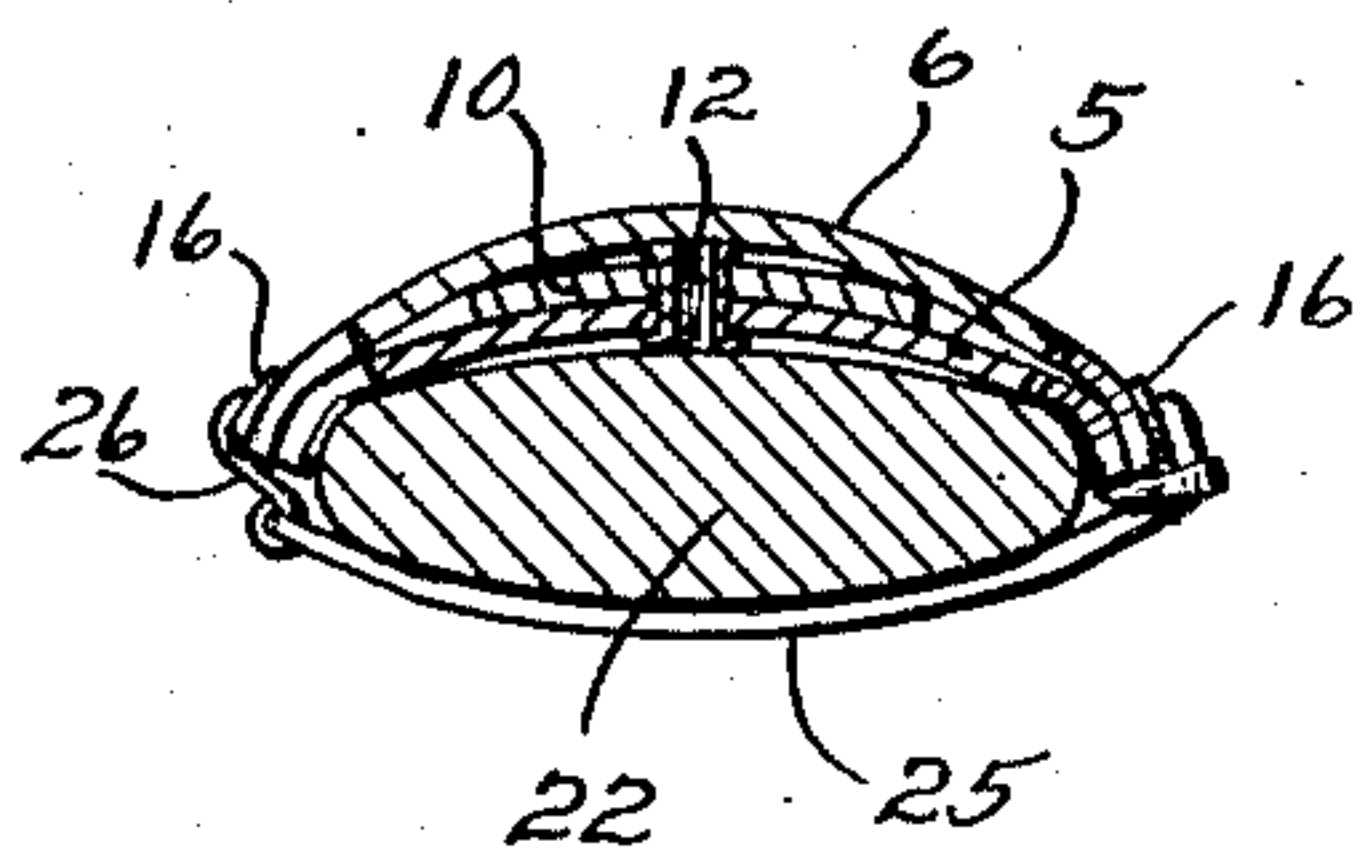


FIG. 5.



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OIL-CHANGE INDICATOR

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The present invention relates to improvements in indicators and the primary object of the invention is to provide an indicator adapted to serve as a reminder for the drivers of motor vehicles for indicating when the oil should be changed in the crank case of the engine.

A further object of the invention is to provide an oil change indicator adapted to be applied to one of the spokes of the steering wheel where the same will be at a location in constant view of the driver.

A further object of the invention is to provide a device of this nature having a construction and shape such that when the same is applied to a spoke of a steering wheel the indicator discs will be frictionally held against accidental turning due to vibration or other causes.

A further object of the invention is to provide a device of this character which may be economically constructed and readily applied to steering wheel spokes of different shapes and cross sectional configurations.

Other objects and advantages of the invention will be apparent during the course of the following detailed description, taken in connection with the accompanying drawing forming a part of this specification and in which drawing:

Figure 1 is a face plan view of the improved oil change indicator.

Figure 2 is a plan view of the back or disc carrying plate with the cover or face plate removed.

Figure 3 is a longitudinal section thru the indicator on the line 3—3 of Figure 1.

Figure 4 is a fragmentary plan view of a steering wheel and showing the indicator applied to one of the spokes of the steering wheel.

Figure 5 is an enlarged transverse on the line 5—5 of Figure 4 and showing the manner in which the device is transversely arcuated when applied to the steering wheel spoke.

Referring to the drawing in detail, and wherein similar reference characters designate corresponding parts thruout the several views, the improved oil change indicator A embodies a pair of superposed plates forming

a back plate 5 and a face or cover plate 6. The plates 5 and 6 are of like outline and as shown are of elongated formation having rounded ends 7 and having their side edges 8 inwardly curved on an arc from each end of the plate. The plates 5 and 6 are preferably formed of a flexible material such as celluloid or the like.

Secured to the forward face of the back plate 5 in spaced relation longitudinally of the plate is a series of preferably four disc dials 10 each having delineated thereon an annular row of numerals 11 running from 0 to 9. These discs 10 are also of a flexible nature and are preferably secured on their axes to the plate 5 by means of eyelets 12 permitting independent rotation of the discs. Provided in the face side of each disc 10 inwardly of the annular row of numbers 11 is a series of annularly arranged depressions 14 being equally spaced apart and one being provided for each of the numerals 11.

The cover or face plate 6 is secured in overlying relation over the back plate 5 by means of four eyelets 15 passed thru each corner of the plates. When the plates are thus joined in superposed relation by the eyelets 15 the disc dials 10 are disposed between the plates and wholly inward from the marginal edges of the plates. With the discs spaced inwardly from the edges of the plates the discs are prevented from being accidentally rotated.

The base plate 6 is provided with four preferably circular sight openings 18, one being provided for each of the discs 10 and arranged so that upon rotation of the discs the numerals 11 will pass the sight openings. Provided also in the face plate 6 are four arcuate-shaped slots 20 one of which is disposed directly above the annular series of depressions 14 of each disc. These arcuate slots 20 will permit of a pointed implement such as a pencil or the like being engaged in one of the depressions 14 for rotating the dials so that the desired numeral may be brought into alignment with the sight openings.

The method of attaching of the device to one of the spokes 22 of the steering wheel 24

preferably consists of elastic bands 25 one of which is looped thru the eyelets 16 at one side of the connected plates. Connected to each elastic band 25 is an S hook 26 which is intended to be hooked into the eyelets 15 at the opposite side of the indicator.

In attaching the indicator to the spoke 22 the device is placed longitudinally of the spokes with the back plate 5 engaging the upper side of the spoke and after which the elastic bands 25 are passed beneath the spoke to extend transversely thereof and the hooks 26 inserted in the eyelets 15. As will be observed in Figure 5 this attachment of the indicator to the spoke arcuates the plates 5 and 6 transversely and causes the plates to so frictionally engage the discs as to resist turning movement of the discs thru vibration. Thus it will be seen that this flexing of the indicator will hold the rotatable discs against movement so that the numerals 11 will not change positions at the sight openings 18.

In use, the dials 10 are set as by means of a pointed implement inserted in the arcuate slots 20, to correspond with the reading of the last four numbers on the speedometer at the time the oil in the crank case is changed. The indicator being mounted upon the spoke of the steering wheel is at a location where its presence may most frequently be observed by the driver, and a comparison between the indicator and speedometer reading will determine the number of miles the vehicle has traveled since the oil in the crank case has changed. The device may either be removed from the spoke for turning the dials or the dials may be turned while the device is applied to the spoke.

With the indicator of a flexible nature the same will snugly adhere to the spoke and allow the driver to grasp the spoke with a comfortable grip if so desired. While the device may be applied to the spoke in various other manners it is preferred that elastic tie members be provided for retaining the device in a transversely flexed position upon the spoke and thereby prevent accidental turning of the dials.

From the foregoing it will be apparent that a novel and improved oil change indicator has been provided which may be readily applied to the spoke of a steering wheel in a flexed condition whereby the rotatable disc dials are frictionally held against rotation due to vibration.

Changes in the shape, size and arrangement of parts may be made to the form of invention herein shown and described, without departing from the spirit of the invention or the scope of the following claims.

I claim:

1. An indicator of the class described comprising a pair of elongated superposed flexible plates, a series of disc dials rotatably mounted between the plates and having nu-

merals thereon visible thru sight openings provided in one of the plates, means connecting the plates at each corner, and a flexible attaching member carried by each end of the indicator at one side thereof and having detachable connection with the opposite side of the indicator at the corner portions thereof.

2. An indicator of the class described comprising a flexible back plate, a series of dials rotatably mounted upon the upper face of the plate, a flexible cover plate disposed over the back plate and having sight openings for each of the dials, an eyelet connecting the plates at each corner thereof, and a flexible attaching member connected in each eyelet at one side of the plates and having detachable connection with the transversely disposed eyelets.

3. An oil change indicator for attachment to a spoke of a vehicle steering wheel comprising a pair of elongated flexible plates, a series of indicator dials rotatably mounted between the plates and having numerals thereon visible thru sight openings provided in the upper plate, means connecting the plates in superposed relation, and an elastic coupling member associated with each end of the connected plates for transversely arching the plates when applied to the spoke.

4. An oil change indicator for attachment to a spoke of a vehicle steering wheel comprising a flexible back plate, a series of dials rotatably carried by the plate, a flexible cover plate arranged over the back plate and having sight openings one for each of said dials, an eyelet connecting the plates at each corner thereof, an elastic attaching member connected in each eyelet at one side of the indicator, and a hook carried by each elastic member for extending transversely of the indicator for connection in the eyes at the opposite side of the indicator whereby the indicator is transversely flexed.

5. An oil change indicator for attachment to a spoke of a vehicle steering wheel embodying flexible back and cover plates, said cover plate having sight openings therein, a series of dials rotatably mounted upon the back plate beneath the cover plate and having numerals for display at the sight openings in the cover plate, means connecting the plates in superposed relation, and means for normally maintaining the plates transversely flexed when applied to the spoke for creating a binding action upon the dials.

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