A NEW FORM OF MOUNTING FOR LARGE REFLECTORS.

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With the increase in size of telescopes difficulties of flexure arise that become very bothersome. In the fork form, even with the heaviest of castings, the fork will bend in all positions of the instrument. With the declination axis horizontal the bending produces its maximum effect (Fig. *I*) and stars will shift on the plate the entire amount in declination, of the angle *a*. When the declination axis is in the meridian (Fig. *II*), the flexure is there just the same, but so applied as not to shift the field of view.

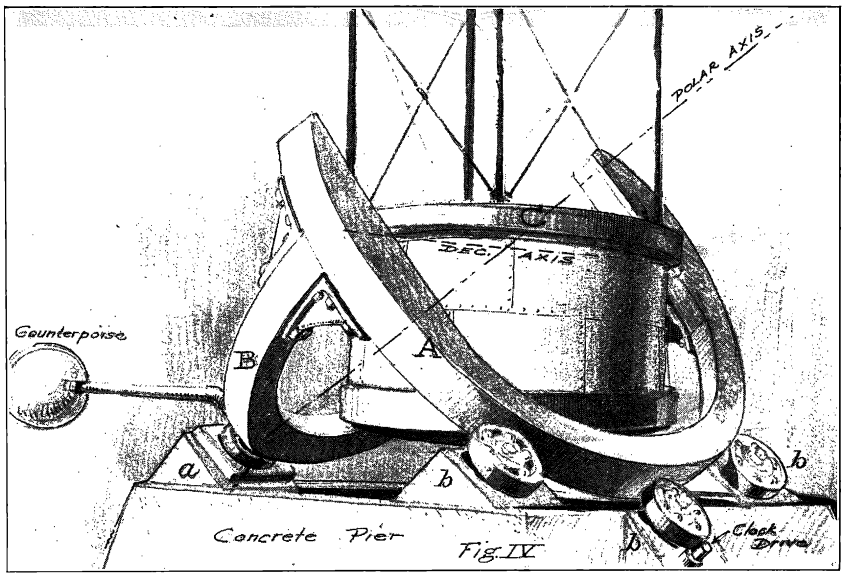

Fig. IV

Therefore the yoke is resorted to. The telescope tube is hung between the two bearings instead of outside of them as in Figure *III*, but it will be seen that in order to gain this rigidity a part of the northern heavens has had to be sacrificed. The writer submits a mounting wherein extreme rigidity is found and the entire heavens retained.

The axle of the polar axis disappears. Rather, the upper bearing is expanded to the size of the equatorial ring, see Figure *IV*, which is a perspective drawing showing the position of the instrument when