

Dear Sir,

I am glad you persevered in your experiment with the little Telescope. I am not at all surprized that you could not distinguish Saturn's Ring with the eye-lens that you have, as it requires a power of 30 or 40 times to bring it out - and I should not suppose that the eye-lens would give you anything like so high a power - but it will be worth while to try whether the object glass will not bear a higher power, as I think it probable it would. The rule for finding the magnifying power is very simple - it is the quotient obtained by dividing the focal length of the object glass by that of the eye-lens. and if you have leisure, it might be instructive and amusing to you to ascertain the power you now have. In order to do this, you must take the object glass out of the tube, hold it up straight before the sun (or moon) and measure the distance in inches to a piece of paper or card, held exactly in the focus, where the image is formed smallest and sharpest defined - this is very easy with the crescent moon, as there is less uncertainty with it, than with the sun,