NOTES FROM PACIFIC COAST OBSERVATORIES

NEBULOSITY ABOUT NOVA PERSEI (1901).

The following negatives of *Nova Persei* (1901) secured with the 60-inch reflector show the nebulosity discovered by Barnard in December, 1916:

	Date	E	Exposure Time		Plate
1917	Sept.	19	io minutes		.Seed 27
	Sept.	20	50 "		. "
	Sept.	20	150 "		. "
	Oct.	17	30 "		. Cramer Crown
	Oct.	18	40 "		. "

The 10-minute plate of September 19 showed a nebulous spot lying in position angle 210° , 10'' distant from the nova. The remaining plates all show the nova involved in nebulosity with the strongest condensations on the south-preceding side. These condensations give a fan-shaped appearance to the nebulosity on that side, which resembles in many ways the nebulosity appearing in the original outburst in 1901.

The bright knot mentioned above does not appear in the 1901 photographs. Two curved wisps, however, concave toward the nova, lying at either side of the knot and inclined in position angle 125° , bear a close resemblance in form and are in the same position angle as those shown in the 1901 photographs, their distance from the nova being one tenth that of the earlier outburst.

From the preceding of these knots a wisp inclined in position angle 200° extends northward, passing the nova on the preceding side.

There is no certain change in the position of any of the details in the interval between these plates.

Three bits of nebulosity (*a* at $p = 19^\circ$, d = 14'.1; *b* at $p = 27^\circ$, d = 18'.2; *c* at $p = 350^\circ$, d = 5'.2) appearing on the 1917 plates are also on all the 1901 plates, and it is believed they are nebulae not connected in any way with the nova.

The apparent wisps crossing the nova at 45° are the diffraction patterns of the bands supporting the Newtonian flat.

FRANCIS G. PEASE.

A NEBULOUS RING ABOUT NOVA PERSEI.

A negative of the region of *Nova Persei* taken with the 60-inch reflector October 16, 1917, shows strongly the small fan-shaped



NEBULOSITY ABOUT NOVA PERSEI, 1917, SEPT. 20 Photographed with the 60-inch Reflector by F. G. Pease



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SMALL NEBULOUS RING ABOUT NOVA PERSEI, 1917, OCT. 16 Photographed with the 60-inch Reflector by G. W. Ritchey