

not from God! No, He had found them out.

The hours passed that turned Paul Daudet into what he ever after was, a bitter, silent, heart-broken misanthrope, in whom no one could have recognized the clever churchmen and brilliant preacher, who once disappeared with the pretty child-wife of his best patron.

The hours passed, yes, and the months and the years. Lonely and embittered Daudet lived. So gruff and rude was his manner that the little clearing in the forest earned through him a forbidding name. The Indians avoided it—they said an

evil spirit roamed there—so in time the few settlers near named it "The Devil's Half-acre," and to this day the name clings to it. Yet, once it was a forest Eden. Alas, for the lasting happiness of man! Soon even its name will be a thing of the past. The axeman has already laid its south-east forest guardians low. Soon their grand old companions will share their fate; and the plough following in due course of events, the spot where Paul Daudet and pretty Lois lived and loved, will be scarce a memory; the green oasis with its log cabin a thing of the far off past; the moral it preached a forgotten warning.

SCIENTIFIC NOTES.

(ASTRONOMICAL.)

In the report for 1892 issued by The Astronomical and Physical Society of Toronto there appeared, as the frontispiece, a drawing by one of the members, representing an observation of Jupiter made by him on the 20th of September, 1891. The object of the drawing was to show the uncommon apparition of a double shadow following Satellite I in transit across the planet's disc. The member asked Dr. Barnard, the discoverer of Jupiter's fifth moon, and Mr. W. F. Denning, F. R. A. S., of Bristol, England, a careful observer of Jupiter, to suggest a theory that would account for the apparition, which had several peculiar features connected with it. These gentlemen, not having seen the phenomenon, declined to commit themselves to a definite statement. The subject has, however, been recently revived in *L'Astronomie*, a monthly publication, edited by the celebrated Camille Flammarion, in which the drawing is copied. After setting out the facts, the article proceeds thus:—"L'explication la plus simple de ces phénomènes paraissait être celle qui en été donnée par M. Flammarion: l'atmosphère de Jupiter aurait une très grande profondeur, et ses nuages seraient étages à de grandes distances. L'ombre d'un satellite tomberait tantôt sur des nuages supérieurs et tantôt sur les couches inférieures ou sur le disque lui-même. Mais dans l'observation actuelle la distance est bien grande entre les deux ombres." This view is not, however, universally accepted,—a fact brought out in a recent discussion upon the article in a French magazine, which arose in the Royal Astronomical Society, and was led by Mr. Edwin Holmes, F. R. A. S., the discoverer of the Holmes' Comet, which occasioned some popular excitement in November of last year. There is considerable diversity of opinion on the matter.

Miss C. W. Bruce, of New York, by a princely gift of \$50,000, has rendered a great service to astronomical science. With this money, the Clarks have been able to construct for the Harvard College Observatory a photographic telescope carrying an object glass two feet in diameter. This instrument will be able to photograph in five minutes faint stars requiring twenty minutes exposure in older telescopes, and at the same time will cover five times as much sky. The spectra of faint stars can also be photographed better than before. The telescope will first be mounted at Cambridge, Mass., and then at Arequipa, Peru, so that the entire heavens may be photographed by it. Well, done, Miss Bruce. Would there were more like you!

During the first part of September, Mercury will be a morning star; but will rise so short a time before the sun, that he will not be readily visible. Towards the end of October, he will again be an evening star, and will be visible in the twilight, just after sunset. Venus is an evening star, but will not be well placed for observation until the latter part of October. October 12th, at 9.40 p. m., Venus and the bright star Delta Scorpii will be so close together that they will appear in the same field of the telescope. Mars, Saturn, and Uranus are practically invisible. Jupiter is the most lustrous object in the midnight sky. His place is in Taurus, between the Pleiades and the Hyades. No amateur astronomer should lose the opportunity afforded this year of studying Jupiter and his system, [as his position is very high in the heavens, and he may, therefore, be seen to uncommon advantage. Neptune is also in Taurus, about 14° east of Jupiter and near Iota Tauri.