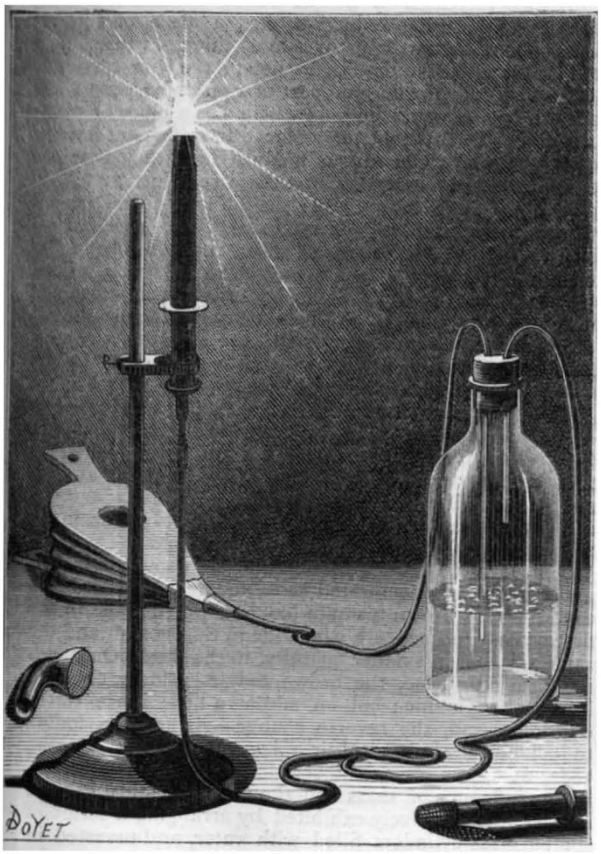
the problem of easy production of an adequate luminous source was hardly solved.

Dr. Regnard has lately conceived the idea of getting a bright light by burning on platinum gauze a mixture of air and petroleum vapour. The intense heat which results raises the platinum to bright incandescence, giving a light equal to about half the lime-light.

The apparatus (described in *La Nature*, to which we are indebted for the accompanying figure) is very simple. There is an ordinary Bunsen burner, terminated by a small cage of platinum wire. The mixture of air and petroleum vapour is admitted below, in place of the gas; it is produced by a familiar method, and the current is generated by means of a pair of bellows or a Richardson "pear." With a ventilator or "trompe," several of the lamps may be maintained in action at once, for lighting halls, workshops, &c., where there is no gas. The aspect



Regnard's Incandescent Lamp.

is that of electric incandescent lamps. In this case, it is well to augment the volume of the carbonator, so that the supply of petroleum vapour is abundant. To send all the light in one direction, the Bunsen burner may be fitted with a bent trumpet-shaped nozzle closed with platinum gauze. One has merely to regulate, with the ring of the burner, the admission of the mixture of air and vapour, to have, whenever the current is produced, an extremely bright light.

With a large loaded bag of air under the table the lamp may be kept in action for several hours, without requiring attention.

The apparatus should be useful to medical men in examination of the larynx, ear, &c.

The expenditure is very small, only a few centimes an hour, with maximum action.

OBSERVATIONS OF THE SOLAR ECLIPSE OF 1882, MAY 16, MADE AT THE RADCLIFFE OBSERVATORY, OXFORD

THE weather was very favourable, the sky being quite clear.

Ref.	Phenomenon.	Observer.	Greenwich mean solar time.	Instrument.	Aperture.	Clock or chronometer used.	Power used.
			h. m. s.		inches.		
(*a*)	Beginning of eclipse.	Mr. Wickham.	18 12 53·1	Heliometer.	7½	Clock, Dent, 952.	140
(*b*)	,, ,,	Mr. F. Bellamy.	18 12 59·6	Dollond.	3½	Chron., Birch.	80
	,, ,,	Rev. S. J. Perry.	18 12 58·8	Cooke, No. 1.	6	,, { Black and Murray, No. 609.	60
	,, ,,	Mr. Luff.	18 12 52·6	—	2¾	,, Pocket Solar.	60
(*g*)	Disappearance of a Lunar Mountain.	Mr. Stone.	19 7 2·2	Cooke, No. 2.	6	,, { Frods. and Baker, No. 6149.	120
(*g*)	Disappearance of a Lunar Mountain.	Rev. S. J. Perry.	19 7 1·9	Cooke, No. 1.	6	,, { Black and Murray, No. 609.	120
(*c*)	Ending of Eclipse.	Mr. Wickham.	19 21 55·5	Heliometer.	7½	Clock, Dent, 952.	140
(*d*)	,, ,,	Mr. Robinson.	19 21 56·8	Cooke, No. 3.	6	Chron., Dent, 2188.	150
(*e*)	,, ,,	Mr. F. Bellamy.	19 21 51·3	Dollond.	3½	Birch.	80
(*f*)	,, ,,	Rev. S. J. Perry.	19 21 47·4	Cooke, No. 1.	6	,, { Black and Murray, No. 609.	60
	,, ,,	Mr. Luff.	19 21 52·4	—	2¾	,, Pocket Solar.	60

Remarks.—(*a*) The first contact was detected as the merest trace of an indentation on the sun's limb, and the time recorded is considered precise. (*b*) Limbs very steady; the time noted may be a very little late. (*c*) The recorded time of last contact considered accurate, as the moon's limb was followed steadily till the last. The tremor of the sun's limb did not very materially affect the definition. (*d*) Just before contact limbs slightly tremulous; observation considered fairly good. (*e*) Observation good. (*f*) If anything a fraction of a second too soon.

(*g*) This mountain was the highest peak of a ridge of mountains which were conspicuous on the moon's limb.

E. J. STONE