that by a somewhat greater restriction of the range of refrangibility of the light which is allowed to reach the plate, a still better result may be obtained.

Plates might be prepared sensitive to a limited range of light, but the rapid falling off of the coronal light about H would make it undesirable to endeavour to do without an absorptive screen. Lenses properly corrected might be employed, but my experience shows that excessive caution would have to be taken in respect of absolute cleanness of the surfaces and of some other points. There might be some advantage in intercepting the direct light of the sun itself by placing an opaque disk of the size of the sun's image upon the front surface of the absorptive screen. Though for the reasons I have already stated I did not attempt eye observations, there seems no reason why with suitable screens and under suitable atmospheric conditions the corona should not be studied directly by the eye. There might be some advantages in supplementing the photographic records by direct eye observations. I regret that the very few occasions on which it has been possible

to observe the sun has put it out of my power to make further experiments in these and some other obvious directions.

Postscript. I have Captain Abney's permission to add the following letter this day received from him. »A careful examination of your series of sun-photographs, taken with absorbing media, convinces me that your claim to having secured photographs of the corona with an uneclipsed sun, is fully established. A comparison of your photographs with those obtained during the eclipse which took place in May last, shows not only that the general features are the same, but also that details, such as rifts and streamers, have the same position and form. If in your case the coronal appearances be due to instrumental causes, I take it that the eclipse photographs are equally untrustworthy, and that my lens and your reflector have the same optical defects. I think that evidence by means of photography of the existence of a corona at all is as clearly shown in the one case as in the other.«

Upper Tulse Hill, London S. W. 1882 Dec. 15.

William Huggins.

Observations of Great Comet of September 1882,

made at the Cambridge Observatory, with the Northumberland Equatorial and Square Bar Micrometer.

1882	Greenw. M. T.	Aberr. time	App. RA.	Parall.	App. Decl.	Parall.	Comp.	*
Oct.	25.70448	— .00842	10 ^h 5 ^m 20 ^s 019	— 0 ^s 179	— 17° 24' 19 [″] 81	+ 5 [″] 39	5	<i>a</i>
			19.724		34.22		5	<i>b</i>
	72215	— .00842	10 5 17.982	— 0.157	— 17 24 45.81	+ 5.47	5	<i>a</i>
			18.029		59.33		5	<i>b</i>
			<i>c</i> + 1 43.167		<i>c</i> + 11 37.78		5	<i>c</i>
	73970	— .00842	10 5 16.598	— 0.132	— 17 25 8.30	+ 5.54	5	<i>a</i>
			16.523		20.72		5	<i>b</i>
			<i>c</i> + 1 41.831		<i>c</i> + 11 17.89		5	<i>c</i>
	26.69713	— .00843	10 3 54.135	— 0.183	— 17 47 3.22	+ 5.37	5	<i>d</i>
	70755	— .00843	10 3 53.366	— 0.171	— 17 47 15.67	+ 5.42	5	<i>d</i>
			<i>e</i> + 1 8.172		<i>e</i> + 3 29.70		5	<i>e</i>
	72058	— .00843	10 3 52.289	— 0.154	— 17 47 29.28	+ 5.48	5	<i>d</i>
			<i>e</i> + 1 7.166		<i>e</i> + 3 16.46		5	<i>e</i>
			<i>f</i> + 0 49.037		<i>f</i> + 8 19.24		5	<i>f</i>
	29.71667	— .00847	9 59 25.380	— 0.144	— 18 54 17.89	+ 5.52	5	<i>g</i>
	72439	— .00847	9 59 24.524	— 0.133	— 18 54 23.54	+ 5.55	6	<i>h</i>
	30.71791	— .00848	<i>i</i> + 2 4.185	— 0.137	<i>i</i> — 9 49.70	+ 5.54	5	<i>i</i>
	72769	— .00848	<i>j</i> + 1 12.289	— 0.123	<i>j</i> — 4 36.50	+ 5.57	5	<i>j</i>
	73965	— .00848	<i>i</i> + 2 2.318	— 0.105	<i>i</i> — 10 19.85	+ 5.61	5	<i>i</i>
Nov.			<i>j</i> + 1 11.034		<i>j</i> — 4 49.15		5	<i>j</i>
	1.71772	— .00850	9 54 42.313	— 0.127	— 19 59 58.92	+ 5.57	7	<i>k</i>
			42.523		58.65		7	<i>l</i>
	2.70519	— .00851	9 53 6.800	— 0.139	— 20 21 22.35	+ 5.54	2	<i>m</i>
	70914	— .00851	9 53 6.420	— 0.134	— 20 21 27.34	+ 5.56	3	<i>n</i>
	71242	— .00851	9 53 5.772	— 0.130	— 20 21 32.08	+ 5.57	6	<i>o</i>
	5.67997	— .00854	<i>p</i> — 0 13.977	— 0.158	<i>p</i> — 7 6.77	+ 5.48	5	<i>p</i>
	70310	— .00854	9 47 59.632	— 0.126	— 21 25 6.20	+ 5.59	5	<i>q</i>
	70574	— .00854	9 47 58.761	— 0.122	— 21 25 3.78	+ 5.60	3	<i>r</i>

1882	Greenw. M. T	Aberr. time	App. RA.	Parall.	App. Decl.	Parall.	Comp.	*
Nov.	7.69393	— .00855	9 ^h 44 ^m 26 ^s 324	— 0 ^s 128	— 22° 6' 32" 87	+ 5 ^s 59	5	<i>s</i>
	71300	— .00855	9 44 24.540	— 0.099	— 22 7 3.30	+ 5.66	6	<i>t</i>
			24.366		6 54.47		6	<i>s</i>
	8.69769	— .00855	9 42 35.101	— 0.117	— 22 27 11.11	+ 5.62	6	<i>u</i>
			34.674		8.88		6	<i>v</i>
	9.68469	— .00856	9 40 43.331	— 0.133	— 22 47 12.04	+ 5.58	6	<i>w</i>
			42.582		12.41		6	<i>x</i>
	69780	— .00856	9 40 41.674	— 0.111	— 22 47 29.60	+ 5.64	6	<i>w</i>
			41.184		28.95		6	<i>x</i>
	10.66723	— .00857	9 38 48.263	— 0.150	— 23 7 4.65	+ 5.53	5	<i>y</i>
			47.828		5.01		5	<i>x</i>
	67525	— .00857	9 38 47.333	— 0.139	— 23 7 12.86	+ 5.57	5	<i>y</i>
			47.221		11.61		5	<i>x</i>
	14.72505	— .00859	9 30 29.332	— 0.034	— 24 26 0.83	+ 5.79	5	<i>z</i>
			29.701		25 54.95		5	<i>a</i>
	17.70355	— .00861	9 23 55.545	— 0.049	— 25 21 9.42	+ 5.78	5	<i>β</i>
			γ+3 42.039		γ— 0 47.96		5	<i>γ</i>
			δ+1 41.183		δ— 4 37.71		5	<i>δ</i>
			ε—1 4.832		ε+ 8 57.74		5	<i>ε</i>
	20.72437	— .00863	9 16 49.435	+ 0.008	— 26 14 5.26	+ 5.81	5	<i>ζ</i>
			49.615		4.83		5	<i>η</i>
			49.473		5.49		5	<i>θ</i>
			ι—4 4.233		ι— 10 42.90		5	<i>ι</i>
	23.73969	— .00865	9 9 17.401	+ 0.057	— 27 3 5.85	+ 5.78	2	<i>κ</i>
			λ+0 23.305		λ— 1 12.02		2	<i>λ</i>
	26.70023	— .00868	9 1 30.494	+ 0.014	— 27 47 36.82	+ 5.80	6	<i>μ</i>
			30.818		37.44		6	<i>ν</i>
			ξ—1 16.764		ξ— 4 9.79		6	<i>ξ</i>
			ο—2 36.325		ο— 6 19.48		6	<i>ο</i>
			π—5 18.977		π+ 2 30.53		6	<i>π</i>
Dec.	6.66854	— .00884	8 32 36.048	+ 0.040	— 29 42 17.79	+ 5.71	5	<i>ρ</i>
	6.68402	— .00884	8 32 32.033	+ 0.066	— 29 42 33.35	+ 5.68	5	<i>ρ</i>

Assumed mean places for 1882.0 of Stars compared with Great Comet 1882, with reductions to apparent place for the night of observation.

*	α 1882.0	Red.	δ 1882.0	Red.	Authority
<i>a</i>	10 ^h 3 ^m 37 ^s 016	+ 2 ^s 572	— 17° 33' 21".66	— 9".61	Lalande 19797
<i>b</i>	3 33.145	2.567	17 24 41.42	9.72	Arg. Z. 279 N. 55
<i>c</i>	3 32	2.571	17 36 28	9.59	
<i>d</i>	4 55.923	2.591	18 1 18.34	9.61	Lalande 19834
<i>e</i>	2 43	2.599	17 50 36	9.57	
<i>f</i>	10 3 1	2.598	17 55 39	9.57	
<i>g</i>	9 58 42.906	2.687	18 52 9.82	9.41	Arg. Z. 356 N. 41
<i>h</i>	58 50.485	2.687	18 50 23.07	9.41	' ' 42
<i>i</i>	55 45	2.724	19 6 8	9.32	
<i>j</i>	56 36	2.720	19 11 39	9.33	
<i>k</i>	53 45.720	2.783	19 47 32.55	9.11	Lalande 19559 and 19561
<i>l</i>	57 3.070	2.771	19 51 13.48	9.35	' 19641
<i>m</i>	9 57 20.629	+ 2.795	— 20 15 42.58	— 9.34	Arg. Z. 356 N. 39

*	α 1882.0	Red.	δ 1882.0	Red.	Authority
<i>n</i>	9 ^h 57 ^m 40 ^s 31.2	+2.793	—20° 21' 35".36	—9.33	Arg. Z. 356 N. 40
<i>o</i>	56 9.622	2.799	20 23 53.12	9.28	» » » 37
<i>p</i>	48 13	2.910	21 17 26	9.07	
<i>q</i>	43 20.811	2.925	21 28 15.58	8.83	Lalande 19275
<i>r</i>	47 27.325	2.950	21 23 9.30	9.02	Arg. Z. 283 N. 25
<i>s</i>	43 8.002	2.980	22 7 50.76	8.88	Lalande 19269
<i>t</i>	40 51.567	2.988	22 6 33.66	8.80	Arg. Z. 283 N. 16
<i>u</i>	45 36.817	2.999	22 27 56.66	9.00	» » » 23
<i>v</i>	45 47.598	2.999	22 24 37.63	9.03	» » » 24
<i>w</i>	39 12.979	3.051	22 49 9.58	8.81	» » » 14
<i>x</i>	39 31.702	3.048	22 56 31.70	8.78	» » » 13
<i>y</i>	39 15.365	3.079	23 1 56.28	8.88	» » » 12
<i>z</i>	30 28.699	3.228	24 19 36.54	8.78	» Z. 400 N. 138
α	31 14.925	3.227	24 10 37.77	8.85	» 281 N. 3 and 400 N. 137
β	16 16.144	3.363	25 27 49.35	8.43	Melbourne Cat. (1870) 468
β	16 16.134	3.363	25 27 49.77	8.43	Cape Cat. (1880) 4996 } Mean
γ	20 11	3.351	25 20 16	8.61	
δ	22 12	3.345	25 16 20	8.71	
ε	24 57	3.332	25 29 58	8.74	
ζ	21 25.600	3.439	26 3 57.46	9.01	Arg. Z. 290 N. 129
η	24 26.772	3.428	26 4 36.37	9.11	Melbourne Cat. (1870) 474
θ	24 40.192	3.428	26 4 23.14	9.11	» » » 476
ι	20 50	3.441	26 3 13	8.99	
κ	5 57.944	3.578	26 57 34.26	8.79	Arg. Z. 352 N. 179
λ	8 51	3.568	27 1 45	8.89	
μ	5 27.425	3.668	27 42 9.78	9.22	Arg. Z. 352 N. 178
ν	8 36.369	3.657	27 49 6.43	9.29	» » » 184
ξ	2 44	3.676	27 43 18	9.11	
$\omicron$	4 3	3.673	27 41 8	9.17	
π	9 6 46	3.663	27 49 58	9.23	
ρ	8 31 32.882	+4.045	—29 37 51.16	—9.97	Arg. Z. 275 N. 47

Mean places for 1882.0 from other sources, but not used in deducing the Comet's place.

<i>g</i>	9 58 42.248	+2.687	—18 52 12.35	—9.41	Lalande 19696
<i>h</i>	58 50.307	2.687	18 50 23.72	9.41	» 19699
<i>t</i>	40 51.344	2.988	22 6 28.81	8.80	» 19209
<i>u</i>	45 36.905	2.999	22 27 53.31	9.00	» 19338
<i>w</i>	39 13.433	3.051	22 49 10.45	8.81	» 19153
<i>x</i>	39 31.886	3.048	22 56 30.72	8.78	» 19164
<i>y</i>	39 14.234	+3.079	—23 1 54.37	—8.88	» 19154

Cambridge Engl. 1882 Dec. 18.

J. C. Adams.

Osservazioni della Cometa 1882I (Wells)

fatte coll' equatoriale di Starke dal Dr. A. Abetti Astronomo dell' Osservatorio di Padova.*)

La cometa fu scoperta dal signor Wells il 17 marzo | ed annunciata telegraficamente in Europa, fu vista a Vienna
all' Osservatorio privato di Dudley in Albany (Stati Uniti), | ed a Kiel il 21 marzo.

*) Aus den Atti dell' Istituto Veneto auf Wunsch des Verfassers abgedruckt.