

CALENDAR FOR 1901.

JAN.	FEB.	MARCH	APRIL
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SEPT.	OCT.	NOV.	DEC.
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CALENDAR FOR 1902.

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Photographic . .

Exposure Record

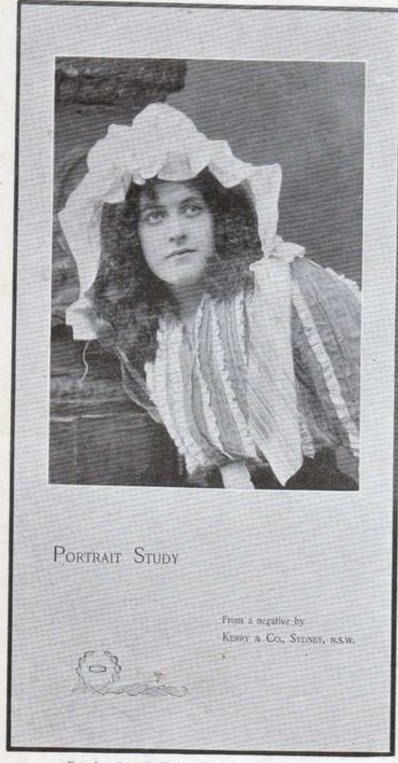
AND DIARY

1901

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Developed with 'Tabloid Brand Pyro Developer

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DHOTOGRAPHERS propose visiting any countries south of the Equator should obtain the SOUTHERN HEMISPHERE EDITION of this book, which contains full exposure tables for all countries between . 10° North latitude and 40° South latitude.

IT may be obtained of any chemist, photographic dealer or bookseller. Price 1/-



EXPOSURE.

I N estimating the exposure necessary for the production of satisfactory negatives various factors have to be taken into consideration. Some of these factors, such as the aperture of the lens, the character of the subject, and the relative sensitiveness of the plate, can be estimated with sufficient accuracy by means of tables, but tables cannot do more than serve as rough guides to the actinic power of the light prevailing at the moment of exposure. Experience

will materially lessen the difficulty of estimating the light value but will not altogether overcome it, especially when exposures for interiors have to be calculated. The only certain method is the employment of an actinometer, or exposure meter, in which the time taken by a strip of sensitive paper to darken to a standard tint is used as

the basis for calculating the correct exposure.

The monthly exposure tables given in the diary pages of this book, based on careful actinometric and other tests made regularly throughout the year, will be found of great service. These tables give at a glance the exposure for the most usual subjects under standard conditions, and it is believed that they will be found as

simple and as reliable as possible.

The figures are calculated to yield fully exposed negatives upon development with normal 'Tabloid' Pyro Developer. In hand camera work it will often be found necessary to work the shutter at a greater speed than indicated, but by careful development or by choosing one of the more rapid 'Tabloid' Developers such as 'Tabloid' Paramidophenol, Metol, Amidol, etc., it will generally be found possible to obtain satisfactory results even when one-half or even one-third of the exposure indicated has been given.

The "standard" subject is taken to be an ordinary landscape with heavy foliage or dark buildings in the foreground, or a portrait or animal study in the open

air-the "standard" stop is F 8.

Using an ordinary landscape plate under these conditions, no reference to any other table is necessary. but when the subject, or the rapidity of the plate differs from the standard, Tables A and B, given on pages 74 and 75, must also be consulted.

Variations for different latitudes (Table C) are given

on pages 79 and 80.

LIGHT VALUES.

It will be noticed that five distinct conditions of light are recognized in the monthly exposure tables. To avoid misunderstanding it is advisable to indicate more precisely than is possible in the tables themselves what is meant by each of these light values.

A. BRIGHT SUNLIGHT means that the sun is shining unobscured by cloud or mist: the sky may be either cloudless and blue or there may be light clouds which serve to increase by reflection rather than diminish the actinic power of the sun's rays.

B. SUN SHINING THROUGH LIGHT CLOUDS indicates a frequently occurring condition. There are light thin clouds or a slight mist between the sun and the earth but the light is still sufficiently direct and powerful to give the feeling of sunlight and to throw strong shadows.

C. DIFFUSED LIGHT means that there is a general even light but no direct sunlight. With this light it is just possible to distinguish cast shadows.

D. DULL indicates a sky covered with dull clouds as distinct from Diffused Light when the sky is covered with bright clouds.

E. VERY DULL means that the whole sky is overcast with heavy gloomy clouds.

LENS APERTURE.

The stops or diaphragms with which lenses are provided serve to control the amount of light transmitted to the sensitive plate or film. Various methods of marking these stops have been suggested and used, but by far the most common is that known as the f system, which indicates the relationship of the diameter of the aperture of the stop to the focal length of the lens with which it is used. Thus f 8 indicates a stop having an aperture the diameter of which measures 1/8th the focal length of the lens with which it is used. A stop with a diameter of 1 in. when used with a lens of 8 in. focal length would therefore be marked f 8, but if the same stop were used with a 16 in. lens it would become f 16. This fact must be borne in mind when using the front or back combinations of an R.R. lens separately. In such cases the focal length is

generally doubled, f 8 becomes f 16, f 11 becomes f 22, and the exposure required is not twice but four times as long.

The following table gives the f values in common use, their corresponding numbers according to the U.S. or Universal System of the Royal Photographic Society of Great Britain, and also their relative exposures taking f 8 as the unit:—

fvalue	f4	f5.6	56	18	fii	f16	f22,6	f 32	145.2	164
U.S. No.										
Relative Exposure										

RECORDING EXPOSURES.

The left hand pages of the diary portion of this book are ruled to enable the photographer to keep a careful record of each exposure he makes. System in this matter is absolutely essential to success in development and it is believed that these pages are so arranged as to greatly facilitate the systematic recording of exposures.

At the time the slides are loaded, the first and second columns should be filled in, so that when more than one kind of plate is carried, a glance will tell which slide contains the plate best suited to the subject to be photographed, or the exposure to be given. There will then be no danger of giving a rapid exposure to a slow plate, or a long exposure to a fast one owing to confusing the slides.

Directly each exposure is made, the necessary notes are jotted down in the third, fourth, fifth, sixth, and seventh columns. This will prevent two views being taken on one plate, and will be an invaluable guide to development, no matter how long that process may be delayed. The date should not be neglected, as it will often be useful for subsequent reference. It is suggested that so far as possible the exposure records should be made opposite the diary page for the same date. The letters A, B, C, D, E may be used in the fifth column to indicate the light value at the time of exposure.

The last column is designed for use in recording the number of the finished negative. Its value depends on whether or not negatives are systematically stored. If so, it is easy, by means of the numbers in this column, to turn up particulars of exposure, etc., of any negative.

Table A.-SUBJECTS.

To use this table multiply the exposure given in the monthly tables for the "standard" subjects by the number opposite to the subject to be photographed. Thus: If the exposure for the "standard" subject is given as 1/2 sec., that for boats at sea will be $1/2 \times 1/4 = 1/8$ sec.

= 1/0 sec.									
Clouds Wave Str	 udies						1/20	to	1/10 1/10
Snow Sce Boats at Glaciers Panoram		(3444		***				1/4
Landsca; White B	pes with uildings	Light	Fore	grou	nds }				1/2
Standar Buildir Animal S	or H	eavv	Folias	re in	Fore	gro	una	***	1
Under T	rees and	Shad	y Bar	iks	***			4	to 20
Portraits				vato	ry			2	to 6
			Similar of						
*Conving		nd Wh	ite D	rawin	igs of	r En	grav	ings	1 4
*Copying page	Photo	graph	s sar	ne s	ize ((see	also	}	4 to 6
*Copying Dark	Oil F Furnitu	aintin re	gs o	r Pl	notog	rap	hing	}10	to 50
	s (Light								
30	(Medi	um)					. (80 1	to 100
	(Dark)					. 10	00 t	500

*These figures are calculated for use when working near a window in a well lighted room. The exposure must be considerably increased if made in a poorly lighted room or away from the window.

Table B.-PLATE SPEEDS.

The monthly exposure tables give the correct exposures for plates such as those marked r in the table below. When plates of greater, or less, rapidity are used this table will give, approximately, the relative exposure. As however, different batches of the same make of plate often vary considerably in speed it is not possible to accept any responsibility for the absolute or relative correctness of the figures given, although every care has been taken to ensure their being reliable. It must also be remembered that rapid and orthochromatic plates are very liable to deteriorate in speed on keeping. Stale plates should therefore be avoided.

To use this table.—Multiply the exposure given in the monthly tables by the figure opposite the plate or film used.

Adams Tella Fil	ms	***			***		1/3
Austin Edwards				(4.44)		***	11/2
reasen and the			loid &	Instar	taneo	us	1/2
		Dou	ble Ins	tantar	neous	***	1/4
Barnet Ordinary	,			***	***	***	1/2
Medium			***	***			*1/3
Extra R				***			1/4
Rocket		***	28.64	****		***	1/5
Beernaert A				***			1/3
В				***			2/3
C	***	2.5.4					1
D				***	222	***	2/3
Brilliant Ordina	ev	200			***	- 444	1
	d Stud	io		***			1/2
	Rapid		100	14.0			1/3
Blair Film		1000	201	MOHU.	***	***	1/2
Cadett Ordinar		2011	neo i	HIPTS			1
Royal				1		***	1/2
Special			months	UMD	-		1/4
Lightni	1/2		381	Bein	27.7		1/5
Lightm	ing	***	195	EUSE.			

Table B.—Plate Speeds (continued) Edwards Special Landscape & Medium		
		11/2
Special Rapid & Med. Iso		1
Instantaneous Iso. & Excelsior		1/2
Snap Shot & Snap Shot Iso,		1/3
Fitch Films, Ordinary	***	1
Rapid		2/3
Extra Rapid		1/3
Gem Universal		1
Portrait	***	1/2
Meteor		1/4
Ilford Photo Mechanical		8
Half Tone	(12.0)	2
Ordinary or Chromatic	***	1
Empress		1/2
Special Rapid		1/4
Imperial Photo Mechanical		6
Fine Grain		2
Ordinary	Oil	Tions
Sovereign	1	1
Special Rapid	***	1/2
Flashlight	***	1/4
(Vadali vota	-	1/5
		1/3
Lumiere Extra Rapid	200	1/3
Orthochromatic A or B	***	1/3
	***	1/2
Marion Landscape		T/19
Portrait		1/3
Portrait	***	1/5
Portrait	***	
Portrait		1/5 7 21/2
Portrait	***	1/5 7
Portrait		1/5 7 21/2
Portrait		1/5 7 21/2 1/2

-					
Table B Plate Spee	ds (cont	inued)	TITLE	TENT
Paget Phoenix & Portrait	ono	***	51.12	o que	1/2
xxx		***	***		1/2
xxxxx		400			1/4
Rainbow, slow					1/2
fast	***	40.0		***	1/3
Sandell Landscape					2
Ordinary		***			1
'Cristoid' Film	***	***	***		1/2
Perfect	***			***	1/3
'Secco' Film					1/2
Thomas Medium, Ordinar	ry or Iso		× •		11/2
Extra Rapid, Or					1
10	***			***	1/2
A. 1, Ordinary or	r Iso				1/3
Thornton Film				***	1/2
Verel Ordinary		***		244	1/2
Special Rapid		***	***	***	1/4
Runaway	***	***		***	1/5
Warwick Ordinary			244	***	1
Instantaneous	***				1/2
Special Rapid	***	(0.64	1.11		1/4
Double Instanta					1/4
Wellington Film		***	***		1/2
Negative Pa		***	***		1/2
Wratten Ordinary					3
Instantaneous				***	1
Drop Shutter	(188)	***	***		1/2
Speed	***		***	***	1/4
	UIIIII S	1000		TAN	HOE! T

EXPOSURES FOR MOVING OBJECTS.

The speed at which the shutter must be worked to give a sharp image of a moving object depends on the focal length of the lens, the rate and direction of movement of the objects and its distance from the camera.

If D = distance of object in feet, F = focal length of lens, S = speed of object in feet per second, and E = exposure for an object moving across the field of view, then

$$E = \frac{D}{100 \text{ F} \times S}$$

To save constant calculation the following table has been prepared, showing in round figures the exposures for various moving objects at 50 ft. distance, using the ordinary quarter plate lens of about 5 in. focus. The column A is for objects moving towards the operator, that marked B for objects moving across the field of view.

Distance of Object, 50 ft.	Α.	В.
Street groups (no rapid motion) .	1/5	PR.
Pedestrians (two miles per hour) Cattle grazing	ı/ıo	1/30
Pedestrians (three miles per hour)	1/15	1/45
Pedestrians (four miles per hour) .	. 1,20	1/60
Vehicles (six miles per hour)	1/30	1/90
Vehicles (eight miles per hour) .	. 1/40	1/120
Cyclists and trotting horses	1/80	1/240
Foot races and sports	. 1/120	1/360
Cycle races, horse galloping	1/175	1/500
Yachts (10 knots per hour)	1/60	1/180
Steamers (20 knots per hour)	. 1/120	1/360
Trains (30 miles per hour)	. 1/160	1/480
Trains (60 miles per hour)	. 1/320	1/900

For the exposure at 100 ft. multiply the above figures by 2.

For the exposure at 25 ft. divide the above figures by 2.

VARIATIONS IN EXPOSURE FOR DIFFERENT LATITUDES.

Owing to the world-wide demand for Wellcome's Photographic Exposure Record and Diary it has been found necessary to issue two separate and distinct editions-one with Exposure Tables suitable for use in the Northern and one with similar tables for the Southern Hemisphere.

The exposures given in this book are calculated for about 52° North Latitude and are approximately correct for-ENGLAND, IRELAND, BELGIUM, HOLLAND, GERMANY, SOUTHERN RUSSIA, NORTHERN CHINA, NEWFOUNDLAND, AND SOUTHERN CANADA.

To find the corresponding exposures for other latitudes use Table C. (see next page), multiplying the exposure given in the monthly tables by the factor opposite the latitude and month for which the correct exposure is required.

The latitudes given may be taken to correspond to the following countries, etc.

60° North Latitude. - ICELAND, FAROE ISLANDS. SHETLAND ISLANDS, SOUTHERN NORWAY (BERGEN), CENTRAL SWEDEN (STOCKHOLM), NORTH RUSSIA (St. Petersburg), Central Siberia (Okhotsk), ALASKA, YUKON (KLONDIKE), NORTH CANADA AND SOUTH GREENLAND (CAPE FAREWELL).

55° North Latitude .- NORTH BRITAIN (NEWCASTLE, EDINBORO', GLASGOW, PERTH), DENMARK (COPEN-HAGEN), SOUTHERN SWEDEN, CENTRAL RUSSIA (Moscow), Southern Siberia (Tomsk), Central CANADA.

40° North Latitude, - Southern Europe (The MEDITERRANEAN), ASIA MINOR, CENTRAL CHINA (Pekin), Korea, Japan, United States (New York, Chicago, Denver, San Francisco).

30° North Latitude. - MADEIRA, CANARY ISLANDS, NORTH AFRICA (MOROCCO, CAIRO), PERSIA, AFGHAN-ISTAN, NORTHERN INDIA (DELHI), TIBET, CHINA (SHANGHAI), UNITED STATES (FLORIDA, NEW ORLEANS, SOUTH CALIFORNIA).

20° North Latitude. - Cape Verd Islands, Sene-GAMBIA, SOUDAN (KHARTOUM), ABYSSINIA, ARABIA (ADEN). INDIA (BOMBAY, CALCUTTA), BURMA (MANDALAY), TONGKING, JAMAICA, CUBA, HAITI, CENTRAL AMERICA (MEXICO), SANDWICH ISLANDS.

Between 10° North Latitude & 10° South Latitude .- CENTRAL AFRICA (UGANDA, ZANZIBAR), SUMATRA, BORNEO, PHILIPPINES, PANAMA, TRINI-DAD, VENEZURLA, GUIANA, EQUADOR, PERU, NORTHERN BRAZIL (PERNAMBUCO).

Exposure.

LATITUDE. DEGREES OF VARIOUS FOR FACTORS EXPOSURE Table C.

and sec. Sunlight, is 1/2 given in Monthly Tables for December, 12 a.m., Bright a conditions it will be $1/2 \times 2 = 1$ sec., at Cairo $1/2 \times 1/2 \times$ At Stockholm under the same conditions it at the Equator 1/2

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JANUARY.

Exposures for the Month :-

The table below gives the exposure in seconds under the following conditions:

Slow plate (marked 1 in TABLE B.-Plate Speeds) Stop 1/8.

Landscapes with heavy foliage or dark buildings in oreground. Portraits and animal studies in the open air.

Ratios for other subjects are given in Table A. Subjects.

	Α	В	C	D	E
TIME.	Bright Sun- light.	Sun shining through light clouds.	Dif- fused light.	Dull.	Very dull.
12	38	1/2	3 4	1	11/2
rr a.m. and r p.m	$\frac{1}{2}$	3 4	1	$1\frac{1}{2}$	2
10 a.m. and 2 p.m.	58	ŧ	11/4	$1\frac{3}{4}$	$2\frac{1}{2}$
9 a.m. and 3 p.m.	$*1\frac{1}{2}$	*2	*3	*4	*6

If using Stop f/4, divide above numbers by 4.

		100				. 4-
10		115.6,		99	**	2,
23			nultiply	22	31	2.
13		f/16,	17	32	22	4.
19	2.7	f/22,	22	23	**	8.
27		f/32,		25	11:	16.
22	1.00	1/45,	11	33	**	32.

^{*} Unless orthochromatic plates are employed these exposures must be increased from 5 to 10 times if there is a yellow sunset

į	2)		5		· X	100	NIN						
Exposure.	5 40	6 day	4000	ni-ora	mop		enyi	anta por menomiques					
Stop.	(1)		iH	m.	ille.	rai		Saw place condition					
Light.	英		100		rie la			Anti- respectability of the control					
Time of day.	Bun	1000	Wan.	0	E E		A						
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iting, etc						n	N	11 14	Sales III	-401		200	
er of ligh	250	JAN S	000	ı	-		-	magazina ana m					
the charact	40	Car	X		1985		opation .	ander pure authority					
The Comment of Highting, etc.	at a	MA	M	ST.	2		II.	Smaps both many					
DATE, L.M.	2	A LA	K	THE REST	XII.		line.	Carry good ginles (gl.)					
A					THE REAL PROPERTY.								
Plate.	Yound	The state of the s	Paka	18.1	1100			For relative exposi-					
No. of Slide,		S.	d		W W	107		marathagar and 2					

FEBRUARY.

Exposures for the Month :-

The table below gives the exposure in seconds under the following conditions:

Slow plate (marked 1 in TABLE B.—Plate Speeds): Stop f/8.

Landscapes with heavy foliage or dark buildings in foreground. Portraits and animal studies in the open air.

Ratios for other subjects are given in Table A. Subjects.

The literal Park of the	A	В	C	D	• E
TIME.	Bright Sun- light.	Sun shining through light clouds,	Dif- fused light,	Dull.	Very
rr a.m. to r p.m.	$\frac{1}{4}$	$\frac{1}{3}$	$\frac{1}{2}$	3	1
10 a.m. and 2 p.m.	$\frac{1}{3}$	$\frac{1}{2}$	203	$1\frac{1}{3}$	$1\frac{1}{2}$
9 a.m. and 3 p.m.	$\frac{1}{2}$	3 4	1	$1\frac{1}{2}$	2
8 a.m.and 4 p.m.	*11/2	*2	*3	*4	*6

If using Stop f/4, divide above numbers by 4.

^{*} Unless orthochromatic plates are employed these exposures must be increased from 5 to 10 times if there is a yellow sunset light.

Exposures	for	the	Month	:-
The table	bel	ow a	ivec the	awaa

Exposure.

Stop.

Light.

Time of day.

Subject: direction and character of lighting, etc.

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The table below gives the exposure in seconds under the following conditions:

Slow plate (marked r in Table B.—Plate Speeds): Stop f/8.

Landscapes with heavy foliage or dark buildings in foreground. Portraits and animal studies in the open air. Ratios for other subjects are given in TABLE A.—Subjects.

	A	В	C	D	E
TIME,	Bright Sun- light.	Sun shining through light clouds.	Dif- fused light.	Dull.	Very dull.
ro a.m. to 2 p.m.	1 5	$\frac{1}{4}$	2 5	$\frac{1}{2}$	45
9 a.m. and 3 p.m.	1/4	$\frac{1}{3}$	$\frac{1}{2}$	2 3	1
8 a.m. and 4 p.m.	38	$\frac{1}{2}$	34	1	$1\frac{1}{2}$
7 a.m. and 5 p.m.	*34	*1	*11/2	*2	*3

If using Stop f/4, divide above numbers by 4.

^{*} Unless orthochromatic plates are employed these exposures must be increased from 5 to ro times if there is a yellow sunset light.

							H	(A)	1			
Fenceuva	Exposure.	19.00	10 %	1000	200	40	2 254	mod	A 50	ded	AGT!	JH2
Ston	Stop.	-XH		1,	1	L	1			min	risker.	make
Light	Light.	A STORY	ingo	Brake	000	200	BILL	- him		Pont	de	oran
Time	Time of day.	No.	D WAR	0 3	DC 30	15:10	S-40	A				A 60124
Subject: direction and character of habring on	DATE	W F. L. D. W. hart Meridian	The state of the transit of the tran	The state of the s	Wra D. M. I'm soll and a	Day of the same of	Partial in what				i de	and on
Plate.	Plate.	(Abe a	D. T.	The state of	n	100	A COLUMN			Control of the contro		OF AS
No. of Slide.	No. of Slide.	1	- 3	a dest	6	16	7	+		THE STATE OF		T P

Exposures for the Month :-

The table below gives the exposure in seconds under the following conditions:

Slow plate (marked 1 in TABLE B.—Plate Speeds): Stop f/8.

Landscapes with heavy oliage or dark buildings in foreground. Portraits and animal studies in the open air.

Ratios for other subjects are given in Table A .- Subjects.

	Α	В.	C	D	E
TIME.	Bright Sun- light.	Sun shining through light clouds.	Dif- fused light.	Dull.	Very dull.
ro a.m. to 2 p.m.	16	1/4	1 3	$\frac{1}{2}$	3
9 a.m. and 3 p.m.	1 5	1/3	2 5	$\frac{2}{3}$	4 5
8 a.m. and 4 p.m.	14	1 3	1/2	$\frac{3}{4}$	1
 7 a.m. and 5 p.m.	38	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{2}$
6 a.m. and 6 p.m.	*34	*1	*11/2	*2	*3

If using Stop f/4, divide above numbers by 4.

^{*} Unless orthochromatic plates are employed these exposures must be increased from 5 to 10 times if there is a yellow sunset light.

Exposures	for	the	Month :-	
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E. gospania for

Stop.

Light.

Time of day.

Subject : direction and character of lighting, etc.

The table below gives the exposure in seconds under the following conditions:

Slow plate (marked 1 in TABLE B.—Plate Speeds): Stop f/8.

Landscapes with heavy foliage or dark buildings in foreground. Portraits and animal studies in the open air. Ratios for other subjects are given in Table A.—Subjects.

	Α	В	C	D	E
TIME.	Bright Sun- light,	Sun shining through light clouds.	Dif- fused light.	Dull	Very dull.
9 a.m. to 3 p.m.	18	1/6	1/4	1/3	$\frac{1}{2}$
8 a.m. and 4 p.m.	$\frac{1}{6}$	1/4	1/3	1/2	1
7 a.m. and 5 p.m.	$\frac{1}{4}$	1/3	$\frac{1}{2}$	34	11/2
6 a.m. and 6 p.m.	*1/2	*34	*1	*1½	*2
5 a.m. and 7 p.m.	*1	*11/2	*2	*3	*4

If using Stop f/4, divide above numbers by 4.

", ", f/5.6, ", ", " 2.

", ", f/x, multiply ", " 2.

", ", f/16, ", " 4.

", ", f/22, ", ", 8.

", ", f/32, ", ", 16.

", ", f/45, ", ", ", 32.

^{*} Unless orthochromatic plates are employed these exposures must be increased from 5 to 10 times if there is a yellow sunset light.

	-	-					42.473	Des				
Franciare.	Exposure				Total	100	The state of		11	nation .	3	
Ston	dots		lea		A	A SECTION AND ADDRESS OF THE PARTY OF THE PA	15	1			74	
Light				The same	B	1	3	H			3	
Time	Time of day	1	1		9	9	3				00	
Plate, 6	ates Da	(3 mas. 2	Portal (5)	Portract (2)	Stake 2	Barres Sein	Lake 3		とうなるかんの	Political Con	Port of hale 4	

No. of Slide.

Exposures for the Month:-

The table below gives the exposure in seconds under the following conditions:—

Slow plate (marked r in Table B.—Plate Speeds): Stop f/8.

Landscapes with heavy foliage or dark buildings in foreground. Portraits and animal studies in the open air. Ratios for other subjects are given in Table Λ.—Subjects.

	A	В	C	D	E
TIME.	Bright Sun- light.	Sun shining through light clouds.	Dif- fused light,	Dull.	Very dull,
9 a.m. to 3 p.m.	$\frac{1}{8}$	1/6	14	1/3	$\frac{1}{2}$
8 a.m. and 4 p.m.	$\frac{1}{6}$	14	1/3	$\frac{1}{2}$	2/3
7 a.m. and 5 p.m.	$\frac{1}{4}$	1 3	$\frac{1}{2}$	23	1
6 a.m. and 6 p.m.	1/3	$\frac{1}{2}$	2/3	1	$1\frac{1}{3}$
5 a.m. and 7 p.m.	*1	*1½	*2	*3	*4
4 a.m. and 8 p.m.	*2	*3	*4	*6	*8

If using Stop //4, divide above numbers by 4.

			Service Control	out ou	44.
79	,, f/5.6,	200	23	21	2.
25	" fir, m	ultiply	1)	**	2,
23	·, f/16,	11	,,	,,	4.
23	, f/22,	91	24	23	8.
. 19	,, f/32,	**	**	21 7	б.
"	" fl45,	m 5	333	39 3	2.

For relative exposures with plates of different speeds see Table B.—Plate Speeds.

* Unless orthochromatic plates are employed these exposures must be increased from 5 to 10 times if there is a yellow sunset light.

Exposures for the Month :-

Stop.

Light.

Subject: direction and character of lighting, etc.

Plate.

The table below gives the exposure in seconds under the following conditions:

Slow plate (marked i in TABLE B. Plate Speeds): Stop f/8.

Landscapes with heavy foliage or dark buildings in foreground. Portraits and animal studies in the open air. Ratios for other subjects are given in Table A.—Subjects.

	Α	В	C	D	E
TIME.	Bright Sun- light,	Sun shining through light clouds	Dif- fused light	Dull.	Very Dull,
9 a.m. to 3 p.m.	18	<u>1</u>	1	1 3	$\frac{1}{2}$
8 a.m. and 4 p.m.	1 6	1/4	1/3	$\frac{1}{2}$	1
7 a.m. and 5 p.m.	1/4	1/3	1/2	$\frac{3}{4}$	$1\frac{1}{2}$
6 a.m. and 6 p.m.	*1/2	*34	*1	*11/2	*2
5 a.m. and 7 p.m.	*1	*11/2	*2	*3	*4

If using Stop f/4, divide above numbers by 4.

", ", f/5.6, ", ", ", 2.
", ", f/11, multiply ", ", 2.
", ", f/16, ", ", 4.
", ", f/22, ", ", 88
", ", f/32, ", ", ", 16.

,, , f/45, ,, ,, 32.

For relative exposures with plates of different speeds see Table B.—Plate Speeds.

* Unless orthochromatic plates are employed these exposures must be increased from 5 to 10 times if there is a yellow sunset light.

The state of the s						1
No. of Slide.	Plate. Subject: direction and character of lighting, etc.	Time of day.	Light.	Stop.	Exposure.	
-	Oden Frain Libre	330	X	4	3	991
-27	Bat to stale		A 30		7	
4	" migh Properto	3.0	X	17	5	
	Lichi to 1206		9	-	No.	5
10000000000000000000000000000000000000	Office 16/19.00	120	0	T	d	
1,1	Charle R & Land Vacada					Y.J
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Ow	Clapson Chicker to ba	A				13
	Soll mather - Lang	1				*
	on Bridge of Mits	2 mg	4	4	4	
d	3 Warened R. Dec R	811	Y	To	1	og H
	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2				f a	-
			4	S. S		
		1		200	The said	

AUGUST.

Exposures for the Month :-

The table below gives the exposure in seconds under the following conditions:

Slow plate (marked 1 in TABLE B.—Plate Speeds): Stop f/8.

Landscapes with heavy foliage or dark buildings in foreground. Portraits and animal studies in the open air.

Ratios for other subjects are given in TABLE A .- Subjects.

	A	D	0	U	
TIME,	Bright Sun- light.	Sun shining through light clouds.	Dif- fused light.	Dull.	Very Dull.
10 a.m. to 2 p.m.	$\frac{1}{6}$	1/4	$\frac{1}{3}$	$\frac{1}{2}$	23
9 a.m. and 3 p.m.	1/5	1 3	2 5	2/3	4 5
8 a.m. and 4 p.m.	1	1 3	$\frac{1}{2}$	34	1
7 a.m. and 5 p.m.	38	$\frac{1}{2}$	34	1	$1\frac{1}{2}$
6 a.m. and 6 p.m.	*34	*1	*11/2	*2	*3

If using Stop f/4, divide above numbers by 4.

99	" fis.6,		,,	**	2.	
	,. f/11, m	ultiply	**	**	2.	
27	,, f/16,	**	"	**	4.	
122	,, fl22,	21		**	8.	
***	,, f/32,	**	.93	11	16.	
	. 1145.			-	32.	

^{*} Unless orthochromatic plates are employed these exposures must be increased from 5 to 10 times if there is a yellow sunset light.

		100					18	UD	JA			1562	ide:	18.	SEPTEMBER.	
	Exposure.										The state of		2	0 .	Exposures for the Month;—	
	Stop.			±								8	0	M	The table below gives the exposure in seconds under the following conditions: Slow plate (marked r in Table B.—Plate Speeds): Stop 7/8.	
	Light.						8								Landscapes with heavy foliage or dark buildings in foreground. Portraits and animal studies in the open air.	
	Time of day.						1						2	T	Ratios for other subjects are given in TABLE A.—Subjects. A B C D E	
-	etc.													No. of the last of	TIME: Sun shining bif-through fused light, clouds,	
	lighting											8	2	W	ro a.m. to 2 p.m. $\frac{1}{5}$ $\frac{1}{4}$ $\frac{2}{5}$ $\frac{1}{2}$ $\frac{4}{5}$	
	acter of														g a.m. and 3 p.m. $\frac{1}{4}$ $\frac{1}{3}$ $\frac{1}{2}$ $\frac{2}{3}$ 1	
	and character of lighting, etc.											29	-	T	8 a.m. and 4 p.m. $\frac{3}{8}$ $\frac{1}{2}$ $\frac{3}{4}$ 1 $1\frac{1}{2}$	
	direction									ăŢ.					7 a.m. and 5 p.m. *3/4 *1 *11/2 *2 *3	
	DATESubject: d									,			36	-	If using Stop f/4, divide above numbers by 4. ,, ,, f/5.6, ,, ,, ,, 2. ,, ,, f/11, multiply ,, ,, 2. ,, f/16, ,, ,, ,, 4. ,, ,, f/22, ,, ,, ,, 8.	
	Plate.		- 20		16-	N. GOV		7			- Southern	18	T	2	For relative exposures with plates of different speeds see Table B.—Plate Speeds.	
1	No. of Slide.				18										* Unless orthochromatic plates are employed these exposures must be increased from 5 to 10 times if there is a yellow sunset light.	WHAT IS

	LOQU		.93	187	187	99	8		lays	1 02			осто	BER.			19	
Exposure.									2	8.2		Exposures for th	e Mon	th ;—				Salkenner
Stop.									88	M		The table below he following conditi Slow plate (mark stop f/8.	ons :					
Light.											113	Landscapes with oreground. Portrai	heavy	foliage unimal st	or dar	k build the op	ings in oen air.	Tight.
Time of day.					Ė				24		-	Ratios for other subj	ects are	given in B	TABLE C	A.—Su D	ibjects.	A dest
, etc.							R					TIME.	Bright Sun- light.	Sun shining through light clouds.	Dif- fused light,	Dull,	Very dull.	
lighting									25	W		11 a.m. to 1 p.m.	1/4	$\frac{1}{3}$	$\frac{1}{2}$	3	1	
racter of				Ž.		l v						10 a.m. and 2 p.m.	$\frac{1}{3}$	$\frac{1}{2}$	2 3	1	$1\frac{1}{2}$	
direction and character of lighting, etc.					M				26	347		9 a.m. and 3 p.m.	$\frac{1}{2}$	3 4	1	$1\frac{1}{2}$	2	iktuals bo
direction												8 a.m. and 4 p.m.	*1½	*2	*3	*4	*6	Station 8
DATE	-								*	2. 4		If using Stop f/4, ,, ,, f/5. ,, ,, f/11 ,, ,, f/16 ,, ,, f/22 ,, ,, f/32	6, ,, , multip	oly ",	,,	2. 2. 1.		Division du
Plate.					1	1			28	TAR.	so	For relative exposee Table B.—Plate	, ,, sures wi		of di	32.	speeds	Dalline .
No. of Slide.								2000			i	* Unless orthochrom nust be increased from ght.	atic plate	es are em times if	ployed there is	these ex a yellov	eposures w sunset G	A STATE OF THE PARTY OF THE PAR

No. of Di

	OCTOBER	30 & 31 Days. SEPT.—OCT. 1901.
Exposure.	Exputates for the Month:	S 29
Stop.	Sice plate (marked a in Tenna 15.—Flute Spends) :	M 30 dander to raled l
Light.	Landecapes with heavy follogy or dark initialings to threegenand. Perturbed and animal studies in the open dir.	M 30 I rede to school for
Time of day.	Lactor for other takents are greated to an A. Subjects. A. B. C. C. E.	Т Ост. 1
etc.	Total State Date Of State Of S	
ighting,	I I I I mare mare	W 2
	The transformer of the property of the propert	
and chara	E 413 I & martin man	Тн 3
irection a	8* 12- 8* 2* 41 may for mas	
DATESubject: direction and character of lighting, etc.	If ming Singya, da its above numbers by a first above numbers by a first analights at the f	F 4
Plate.	For relative exposures with placer of different special control of the Place Speeds.	SAT 5
No. of Slide.	erical pro-position of the problem was called a communication of the problem of t	

	DATE	Time	Light.	Stop.	Exposure.	
	Subject: direction and character of lighting, etc.	or day.				iobr
						.500
AL E						80100
1411						PE
			ý			
	W. 28	22 7		19 N	8 20	yard ar
For relat	12 11 a.m. an 10 a.m. ar 1 g a.m. ar 1 y a.m. ar 1 y a.m. ar 2 y a.m. ar 3 y a.m. ar	TIM	foreground. Ratios for oth	Slow plat Stop f/8.	Exposures The table	a Minima

NOVEMBER.

Exposures for the Month:-

The table below gives the exposure in seconds under the following conditions:

Slow plate (marked I in TABLE B.—Plate Speeds): Stop f/8.

Landscapes with heavy foliage or dark buildings in foreground. Portraits and animal studies in the open air.

Ratios for other subjects are given in TABLE A .- Subjects.

	Α	В	C	D	E
TIME.	Bright Sun- light.	Sun shining through light clouds.	Dif- fused light,	Dull.	Very dull.
12	200	$\frac{1}{2}$	3.	1	$1\frac{1}{2}$
II a.m. and I p.m.	$\frac{1}{2}$	34	1	$1\frac{1}{2}$	2
10 a.m. and 2 p.m.	5 8	78	$1\frac{1}{4}$	$1\frac{3}{4}$	$2\frac{1}{2}$
9 a.m. and 3 p.m.	$*1\frac{1}{2}$	*2	*3	*4	*6

If using Stop f/4, divide above numbers by 4.

^{*} Unless orthochromatic plates are employed these exposures must be increased from 5 to 10 times if there is a yellow sunset light.

	2001		.51	BI	(8)	ON			Ti			DI	ECEN	IBER.			- low
Exposure.									2		E	exposures for the					
Stop.												The table below g he following condition Slow plate (marks stop f/8.	ons:				
Light.					15						fc	Landscapes with preground. Portrait latios for other subje	s and ar	nimal stu	dies in	the op	en air.
Time of day.				The state of the s								unios for other stude	A	B	С	D D	E
g, etc.												TIME.	Bright Sun- light.	Sun shining through light clouds.	Dif- fused light.	Dull.	Very Duli.
direction and character of lighting, etc.								Tr	V			12	1/2	34	1	$1\frac{1}{2}$	2
laracter o								H				11 a.m. and 1 p.m.	58	78	11/4	13/4	$\frac{2\frac{1}{2}}{2}$
on and ch								82	9			10 a.m. and 2 p.m.	34	1	$1\frac{1}{2}$	2	3
												9 a.m. and 3 p.m.	*2	*3	*4	*6	*8
DATE Subject:								9	Q.			If using Stop f/4, ", f/5.6 ", f/11, ", f/16, ", f/22,	multipl	,,	nbers b	2. 2. 4. 8.	
Plate.				joil			Kall	08	TAG		se	", ", f/32, ", f/45, For relative exposi e Table B. Plate S	,, ires wit	,, h plates	of diff	16. 32. ferent s	peeds
No. of Slide.									No. of the last)	III Bi	* Unless orthochroma ust be increased from ght.	tic plate	s are emp	oloyed t	hese ex a yellow	pesures sunset