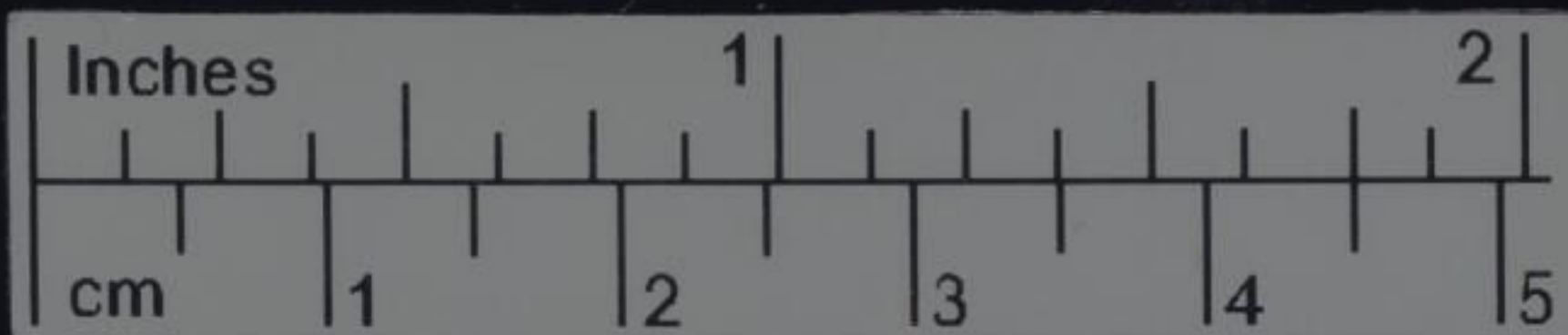




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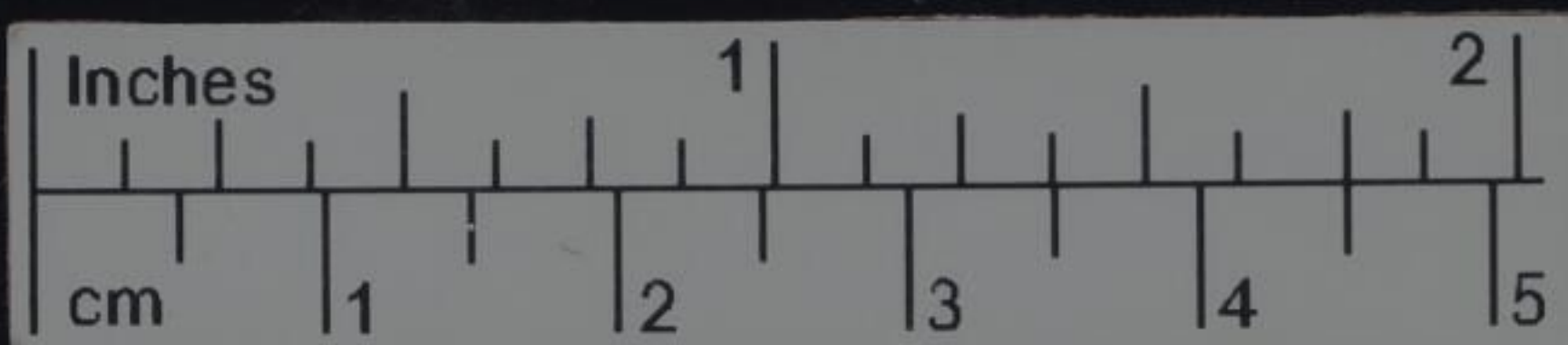


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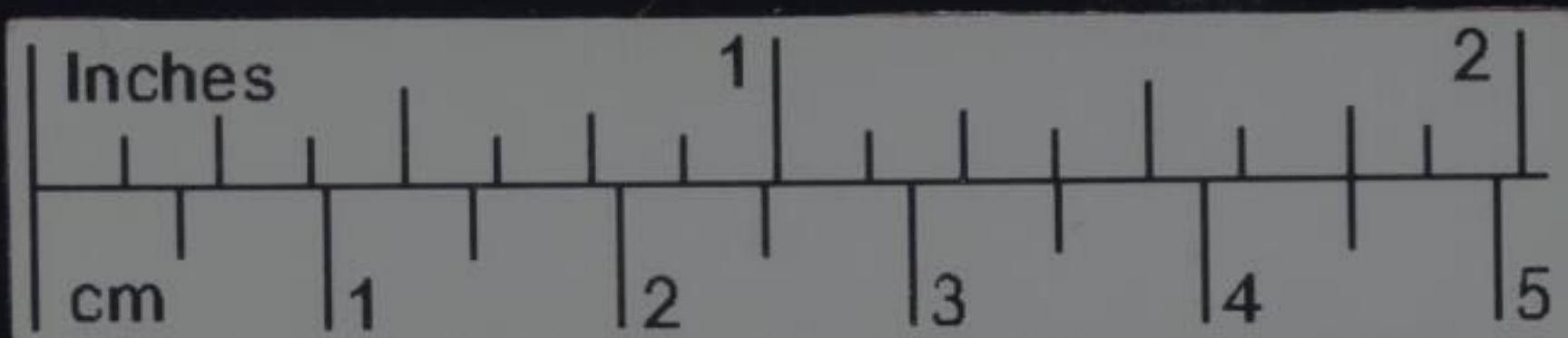
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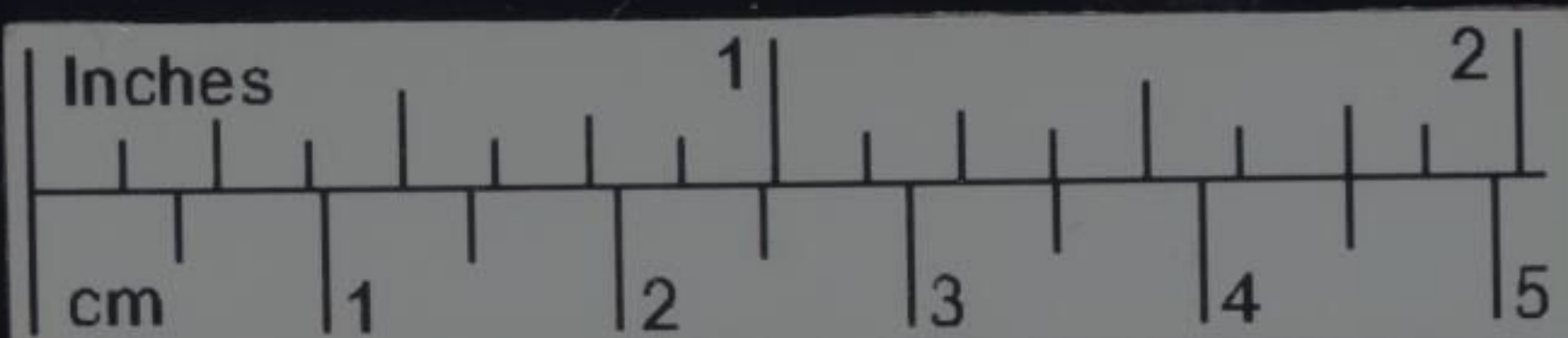
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2

JANUARY, XXXI DAYS. [1847.]

Month days.	Week days.	PHASES OF THE MOON. Full moon, 1st, 2 h. 42 m. aftern. Last Quarter, 9th, 6 40 aftern. New moon, 17th, 0 45 morn. First Quarter, 23rd, 4 18 aftern. Full moon, 31st, 8 29 morn. <i>Clock fast.</i> 7th, 6 m. 27 s. 21st, 11 m. 33 s. 14th, 9 16 28th, 13 12	Sun rises.	Sun sets.
1	F	<i>Circumcision.</i> Bot. Soc. 8	H M	H M
2	S	Asiatic Soc. 2	8 9	4 0
3	C	<i>2nd Sunday after Christmas</i>	8 8	4 1
4	M	Ent. Soc. 8. Chem. Soc. 8	8 8	4 2
5	Tu		8 8	4 3
6	W	<i>Epiphany.</i> Geol. Soc. $\frac{1}{2}$ past 8	8 7	4 4
7	Th	Roy. Soc. $\frac{1}{2}$ past 8. Zool. Soc. 3.	8 7	4 6
8	F	Galileo d. 1642	8 7	4 7
9	S		8 6	4 8
10	C	<i>1st Sunday after Epiphany</i>	8 6	4 10
11	M	<i>Plough Monday.</i> Geog. Soc. $\frac{1}{2}$ past 8	8 5	4 11
12	Tu	Zool. Soc. $\frac{1}{2}$ past 8	8 5	4 12
13	W	Ethn. Soc. 8. Mic. Soc. 8. Phar. Soc. 9	8 4	4 14
14	Th	Oxford Term beg. Roy. Soc. $\frac{1}{2}$ past 8	8 3	4 15
15	F	Roy. Instit. $\frac{1}{2}$ past 8	8 2	4 17
16	S	Brunner b. 1653. Asiatic Soc. 2	8 2	4 18
17	C	<i>2nd Sunday after Epiphany</i>	8 1	4 20
18	M	Chem. Soc. 8	8 0	4 22
19	Tu	Linn. Soc. 8. Hort. Soc. 2	7 59	4 23
20	W	Geol. Soc. $\frac{1}{2}$ past 8	7 58	4 25
21	Th	Roy. Soc. $\frac{1}{2}$ past 8	7 57	4 27
22	F	Lord Bacon b. 1561. R. Inst. $\frac{1}{2}$ past 8	7 56	4 28
23	S	Roy. Bot. Soc. $\frac{1}{4}$ before 4	7 55	4 30
24	C	<i>3rd Sunday after Epiphany</i>	7 53	4 32
25	M	Ent. Soc. Ann. 8. Geog. Soc. $\frac{1}{2}$ past 8	7 52	4 33
26	Tu	Jenner d. 1823. Zool. Soc. $\frac{1}{2}$ past 8	7 51	4 35
27	W		7 50	4 37
28	Th	Roy. Soc. $\frac{1}{2}$ past 8	7 48	4 39
29	F	John Martyn d. 1768. R. Inst. $\frac{1}{2}$ past 8	7 47	4 40
30	S	<i>King Charles I. Martyr</i>	7 45	4 42
31	C	<i>Septuagesima Sunday</i>	7 44	4 44
			7 43	4 46



1847.] JANUARY, XXXI DAYS.

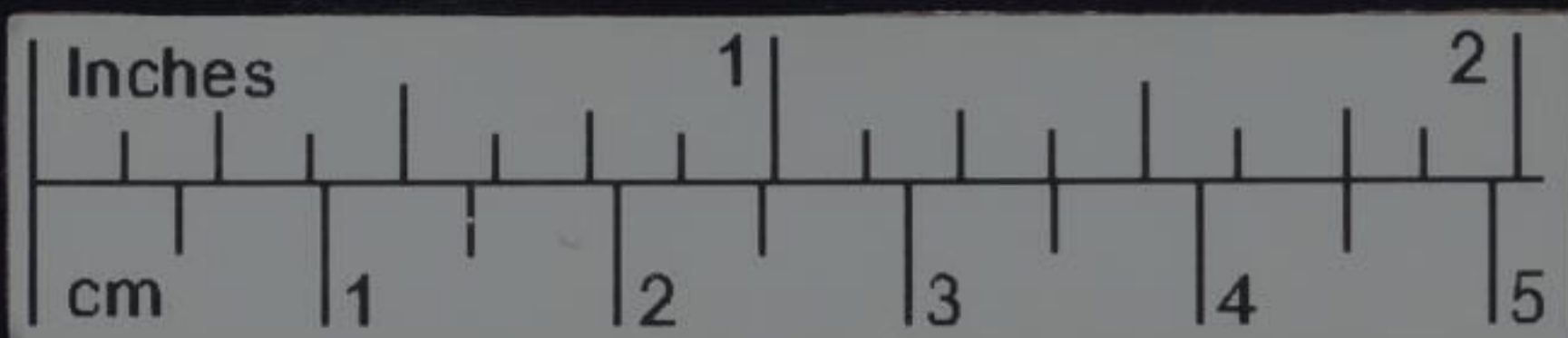
3

CALENDAR OF PERIODIC PHENOMENA.

The following Calendar appended to each month is intended for the use of those observers who may be desirous of registering the dates of occurrence of the principal periodic phenomena in the two departments of Zoology and Botany. Its object is to guide them to about the time when they may expect the phenomena in question first to show themselves. For this purpose the *mean* date, calculated from a greater or less number of years, is prefixed to each, being taken, as well as the selected list of phenomena, from Jenyns's Observations in Natural History. Though this date is strictly applicable only to the neighbourhood of Swaffham Bulbeck, in Cambridgeshire, it may, in a general way, serve for all places having the same, or nearly the same

ap. First appearance. *l.* First opening of leaves.
fl. First opening of flowers.

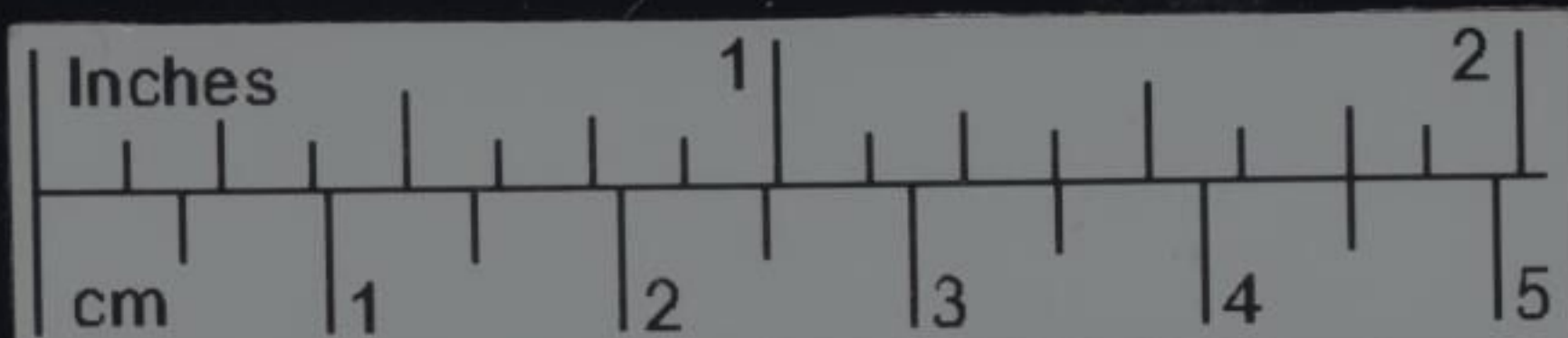
5. Wren (*Troglodytes europæus*), song commences.
8. Redbreast (*Erithaca rubecula*), song commences.
11. Common bunting (*Emberiza miliaria*) note comm.
* Winter gnat (*Trichocera hiemalis*) *ap.*
13. Furze (*Ulex europæus*) *fl.*
15. Marsh titmouse (*Parus palustris*), note commences.
Pale perfoliate honeysuckle (*Lonicera caprifolium*) *l.*
17. Hedge Accentor (*Accentor modularis*), song comm.
19. Cole titmouse (*Parus ater*), note commences.
22. * Mezereon (*Daphne mezereum*) *fl.*
23. Skylark (*Alauda arvensis*), song commences.
24. * Great titmouse (*Parus major*), song commences.
25. * Hazel (*Corylus avellana*), catkins open.
* Hepatica (*Hepatica triloba*) *fl.*
26. * Missel thrush (*Turdus viscivorus*), song commences.
* Winter aconite (*Eranthis hiemalis*) *fl.*
27. House flies appear in windows.
28. * Stinking hellebore (*Helleborus foetidus*) *fl.*
* Daisy (*Bellis perennis*) *fl.*
29. * Hive bee (*Apis mellifica*) comes abroad.
30. * Snowdrop (*Galanthus nivalis*) *fl.*
31. * Song thrush (*Turdus musicus*), song commences.



4

FEBRUARY, XXVIII DAYS. [1847.]

Month days.	Week days.	PHASES OF THE MOON. Last Quarter, 8th, 1 h. 39 m. aftern. New moon, 15th, 11 26 morn. First Quarter, 22nd, 3 59 morn. <i>Clock fast.</i> 7th, 14 m. 25 s. 21st, 13 m. 56 s. 14th, 14 29 28th, 12 51	Sun rises.	Sun sets.
			H M	H M
1	M	Ent. Soc. 8. Chem. Soc. 8	7 41	4 47
2	Tu	<i>Candlemas Day.</i> Linn. Soc. 8	7 40	4 49
3	W	Geol. Soc. $\frac{1}{2}$ past 8	7 38	4 51
4	Th	Roy. Soc. $\frac{1}{2}$ past 8. Zool. Soc. 3	7 36	4 53
5	F	Bot. Soc. 8. Roy. Inst. $\frac{1}{2}$ past 8	7 35	4 55
6	S	Asiatic Soc. 2	7 33	4 57
7	C	<i>Sexagesima Sunday</i>	7 31	4 59
8	M	Sibthorp d. 1796. Geog. Soc. $\frac{1}{2}$ past 8	7 29	5 0
9	Tu	Zool. Soc. $\frac{1}{2}$ past 8 [Soc. 9	7 28	5 2
10	W	Ethn. Soc. 8. Mic. Soc. Ann. 8. Phar.	7 26	5 4
11	Th	Roy. Soc. $\frac{1}{2}$ past 8	7 24	5 6
12	F	Spallanzani d. 1799. Roy. Ins. $\frac{1}{2}$ past 8	7 22	5 8
13	S	Roy. Bot. Soc. $\frac{1}{4}$ before 4	7 20	5 10
14	C	<i>Quinquagesima Sunday</i>	7 18	5 11
15	M	Chem. Soc. 8	7 17	5 13
16	Tu	<i>Shrove Tu.</i> Linn. Soc. 8. Hort. Soc. 2	7 15	5 15
17	W	<i>Ash Wednesday.</i> Saussure b. 1740	7 13	5 17
18	Th	Roy. Soc. $\frac{1}{2}$ past 8	7 11	5 19
19	F	Geol. Soc. Ann. 1. Roy. Ins. $\frac{1}{2}$ past 8	7 9	5 21
20	S	Asiatic Soc. 2	7 7	5 22
21	C	<i>1st Sunday in Lent</i>	7 5	5 24
22	M	Geog. Soc. $\frac{1}{2}$ past 8	7 3	5 26
23	Tu	Zool. Soc. $\frac{1}{2}$ past 8	7 0	5 28
24	W	<i>St. Matthias.</i> Geol. Soc. $\frac{1}{2}$ past 8	6 58	5 29
25	Th	Roy. Soc. $\frac{1}{2}$ past 8	6 56	5 31
26	F	Hervey b. 1714. Roy. Inst. $\frac{1}{2}$ past 8	6 54	5 33
27	S	Hare hunting ends. Evelyn d. 1705	6 52	5 35
28	C	<i>2nd Sunday in Lent.</i> Solander b. 1736	6 50	5 37

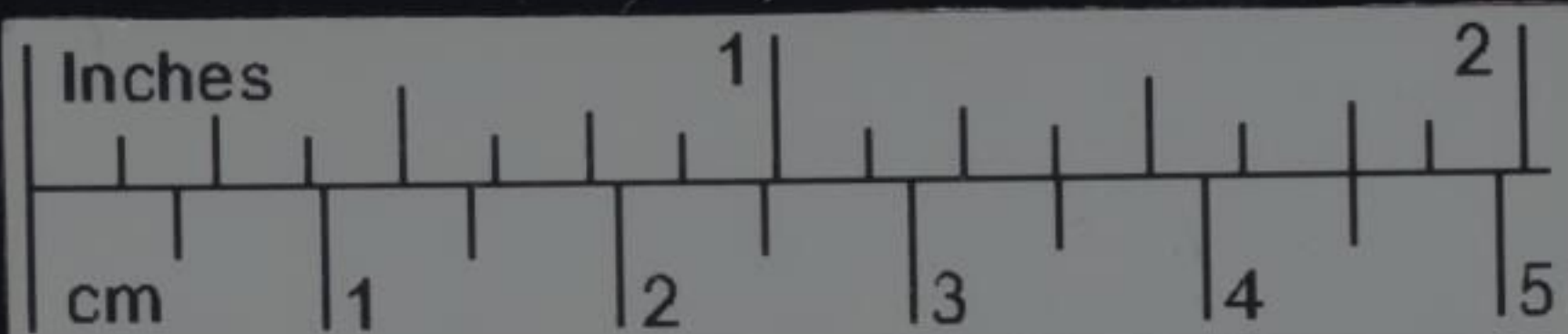


Days. [1847.

aftern. morn. morn.	Sun rises.	Sun sets.
56 s. 51		
	H M	H M
	7 41	4 47
	7 40	4 49
	7 38	4 51
	7 36	4 53
	7 35	4 55
	7 33	4 57
	7 31	4 59
past 8	7 29	5 0
Soc. 9	7 28	5 2
Phar.	7 26	5 4
	7 24	5 6
past 8	7 22	5 8
	7 20	5 10
	7 18	5 11
	7 17	5 13
Soc. 2	7 15	5 15
40	7 13	5 17
	7 11	5 19
past 8	7 9	5 21
	7 7	5 22
	7 5	5 24
	7 3	5 26
	7 0	5 28
8	6 58	5 29
	6 56	5 31
t 8	6 54	5 33
05	6 52	5 35
1736	6 50	5 37

13" L. h.

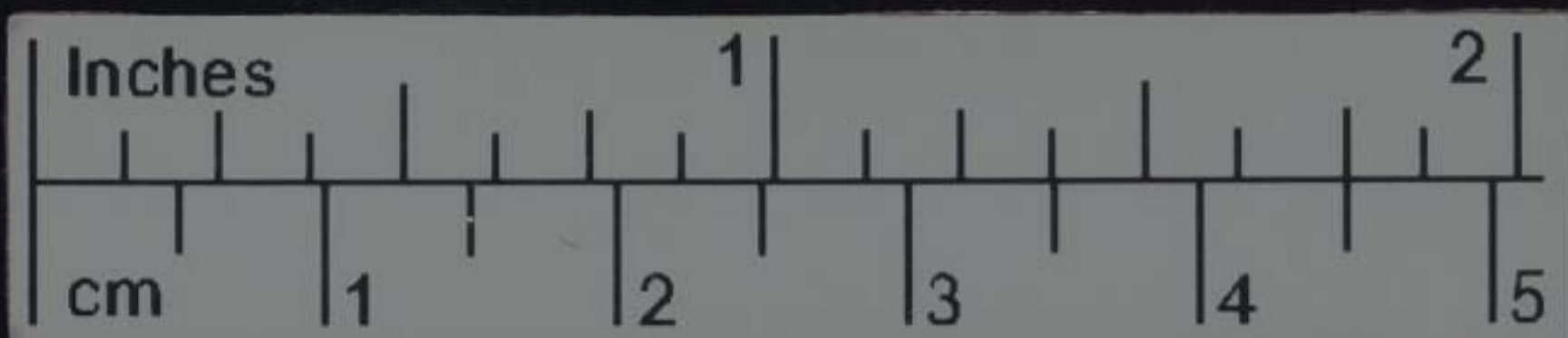
27" L. hatt



latitude as that place. The range of variation in the time of occurrence of some of the phenomena, such as the flowering of plants and the leafing of trees, is from one to two months; the range being greatest in the case of those which occur in the early part of the year, or during the spring: the observer, therefore, should be prepared to expect them sooner or later than the time given,—possibly to the extent of a fortnight, or even more, according as the season may be forwarder or backwarder than usual.

This list is for the most part limited to such phenomena as may be considered more or less prognostic of the particular season in which they occur. Those to which an asterisk is prefixed are amongst the number especially recommended for observation by a Committee of the British Association, in the volume of Reports for 1845 (p. 321), where also will be found the requisite instructions for observers in this department of Natural History.

1. * Pied wagtail (*Motacilla Yarrellii*) first seen.
* Chaffinch (*Fringilla cælebs*), song commences.
2. Tawny owl (*Syrnium aluco*) hoots.
5. * Spurge laurel (*Daphne laureola*) fl.
11. Primrose (*Primula vulgaris*) fl.
12. * Blackbird (*Turdus merula*), song commences.
Butcher's-broom (*Ruscus aculeatus*) fl.
13. Partridge (*Perdix cinerea*) pairs.
14. Gold-crested wren (*Regulus cristatus*), song com.
* Elder (*Sambucus nigra*), l.
15. * Yellow-hammer (*Emberiza citrinella*), song com.
Red dead-nettle (*Lamium purpureum*) fl.
16. Small bloody-nose beetle (*Timarcha coriaria*) ap.
18. * Common honeysuckle (*Lonicera periclymenum*) fl.
Dandelion (*Taraxacum officinale*) fl.
19. * Spring crocus (*Crocus vernus*) fl.
21. * Greenfinch (*Coccothraustes chloris*), song com.
22. * Lesser periwinkle (*Vinca minor*) fl.
23. * Sweet-scented coltsfoot (*Tussilago fragrans*) fl.
24. * Japan Kerria (*Kerria japonica*) l.
25. * Ring-dove (*Columba palumbus*) coos.
28. * Alder (*Alnus glutinosa*) fl.
* Yew (*Taxus baccata*) fl.



6

MARCH, XXXI DAYS.

[1847.]

Month days.	Week days.	PHASES OF THE MOON. Full moon, 2nd, 3 h. 9 m. morn. Last Quarter, 10th, 4 39 morn. New moon, 16th, 9 11 aftern. First Quarter, 23rd, 5 41 aftern. Full moon, 31st, 9 17 aftern. Clock fast. 7th, 11 m. 20 s. 21st, 7 m. 27 s. 14th, 9 30 28th, 5 18	Sun rises.	Sun sets.
			H M	H M
1	M	St. David. Ent. Soc. 8. Chem. Soc. 8	6 48	5 38
2	Tu	Linn. Soc. 8. Hort. Soc. 3	6 46	5 40
3	W	Robt. Hooke d. 1702	6 43	5 42
4	Th	Roy. Soc. $\frac{1}{2}$ past 8. Zool. Soc. 3	6 41	5 44
5	F	Bot. Soc. 8. Roy. Inst. $\frac{1}{2}$ past 8	6 39	5 45
6	S	Asiatic Soc. 2	6 37	5 47
7	C	3rd Sunday in Lent	6 35	5 49
8	M	Geog. Soc. $\frac{1}{2}$ past 8	6 32	5 51
9	Tu	Zool. Soc. $\frac{1}{2}$ past 8	6 30	5 52
10	W	Geol. Soc. $\frac{1}{2}$ past 8. Pharm. Soc. 9	6 28	5 54
11	Th	Barrington d. 1800. Roy. Soc. $\frac{1}{2}$ past 8	6 26	5 56
12	F	Gærtner b. 1732. Roy. Inst. $\frac{1}{2}$ past 8	6 23	5 57
13	S	Roy. Bot. Soc. $\frac{1}{4}$ before 4	6 21	5 59
14	C	4th Sunday in Lent	6 19	6 1
15	M	Chem. Soc. 8	6 17	6 3
16	Tu	Linn. Soc. 8. Hort. Soc. 3	6 14	6 4
17	W	St. Patrick. Ethn. Soc. 8. Mic. Soc. 8	6 12	6 6
18	Th	Roy. Soc. $\frac{1}{2}$ past 8	6 10	6 8
19	F	C. Le Brun b. 1739. Roy. Inst. $\frac{1}{2}$ past 8	6 8	6 9
20	S	Sir I. Newton d. 1727. Asiatic Soc. 2	6 5	6 11
21	C	5th Sunday in Lent. Spring Qr. com.	6 3	6 13
22	M	Goethe d. 1832. Geog. Soc. $\frac{1}{2}$ past 8	6 0	6 14
23	Tu	Laplace b. 1749. Zool. Soc. $\frac{1}{2}$ past 8	5 58	6 16
24	W	Geol. Soc. $\frac{1}{2}$ past 8	5 56	6 18
25	Th	Lady Day. Roy. Soc. $\frac{1}{2}$ past 8	5 54	6 19
26	F	Camb. term ends. Roy. Inst. $\frac{1}{2}$ past 8	5 52	6 21
27	S	Oxf. term ends. R. Bot. Soc. $\frac{1}{4}$ bef. 4	5 49	6 23
28	C	Palm Sunday	5 47	6 24
29	M	Major Rennell d. 1830	5 45	6 26
30	Tu	Chem. Soc. Ann. 8	5 42	6 28
31	W	Haydn b. 1732. Eclipse of the moon	5 40	6 29

Vest

12 v. h.

13 f. h.

27 f. h.

29th April
v. h.



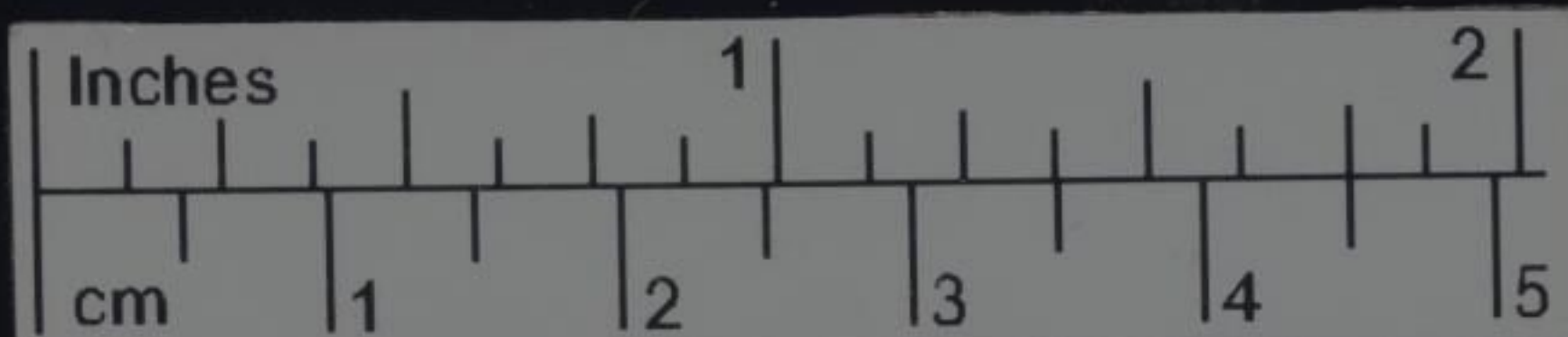
DAYS. [1847]

ON.		
m. morn.		
morn.		
aftern.		
aftern.		
aftern.		
m. 27 s.		
18		
	H M	H M
m. Soc. 8	6 48	5 38
	6 46	5 40
	6 43	5 42
c. 3	6 41	5 44
8	6 39	5 45
	6 37	5 47
	6 35	5 49
	6 32	5 51
	6 30	5 53
Soc. 9	6 28	5 54
1/2 past 8	6 26	5 56
1/2 past 8	6 23	5 57
	6 21	5 59
	6 19	6 1
	6 17	6 3
	6 14	6 4
c. Soc. 8	6 12	6 6
	6 10	6 8
1/2 past 8	6 8	6 9
c Soc. 2	6 5	6 11
Qr. com.	6 3	6 13
past 8	6 0	6 14
past 8	5 58	6 16
	5 56	6 18
	5 54	6 19
1/2 past 8	5 52	6 21
1/4 bef. 4	5 49	6 23
	5 47	6 24
	5 45	6 26
	5 42	6 28
moon	5 40	6 29

13th L^h. h.

27th L^h. h.

29th. Agreed to pay 2^d per
week for 6 boys to h. in
school

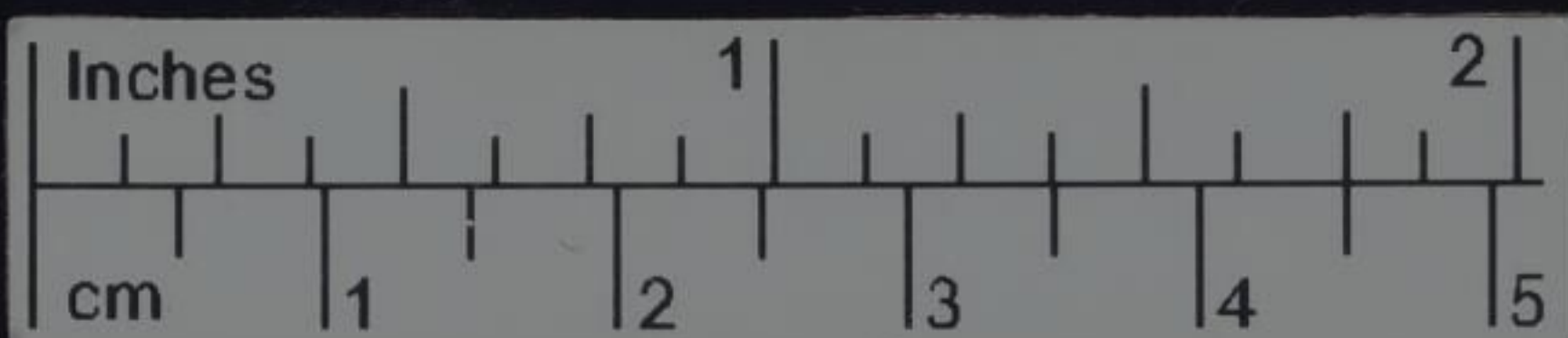


1847.] MARCH, XXXI DAYS.

7

The observer, however, may extend his inquiries to many other phenomena besides those here enumerated, and in so doing he will open to himself a never-failing source of amusement. The great bulk of such phenomena occur during the spring and summer months, when the observer's

2. * Pilewort (*Ranunculus ficaria*) fl.
3. * Rooks (*Corvus frugilegus*) build.
4. Marsh-marygold (*Caltha palustris*) fl.
5. * White dead-nettle (*Lamium album*) fl.
6. * Dor-beetle (*Geotrupes stercorarius*) ap.
7. * Sweet violet (*Viola odorata*) fl.
10. * Brimstone butterfly (*Gonepteryx rhamni*) ap.
* Apricot (*Armeniaca vulgaris*) fl.
13. * Gooseberry (*Ribes grossularia*) l.
Common coltsfoot (*Tussilago farfara*) fl.
* Daffodil (*Narcissus pseudonarcissus*) fl.
16. * Frog (*Rana temporaria*) spawns.
17. * Syringa (*Philadelphus coronarius*) l.
* Aspen (*Populus tremula*) fl.
18. * Lilac (*Syringa vulgaris*) l.
19. Blue navelwort (*Omphalodes verna*) fl.
20. * Pipistrelle bat (*Vespertilio pipistrellus*) comes abroad.
* Humble bee (*Bombus*) ap.
* Banded Snail (*Helix nemoralis*) comes abroad.
21. * Common elm (*Ulmus campestris*) fl.
23. * Common linnet (*Linota cannabina*), song com.
* Oil beetle (*Proscarabæus vulgaris*) ap.
* White-thorn (*Cratægus oxyacantha*) l.
24. * Red currant (*Ribes rubrum*) l.
25. Jackdaw (*Corvus monedula*) builds.
27. * Common toad (*Bufo vulgaris*) spawns.
* Small tortoise-shell butterfly (*Vanessa urticæ*) ap.
Hyacinth (*Hyacinthus orientalis*) fl.
28. Privet (*Ligustrum vulgare*) l.
* Gooseberry (*Ribes grossularia*) fl.
29. * Large bloody-nose beetle (*Timarcha tenebricosa*) ap.
* Hazel (*Corylus avellana*) l.
30. Cowslip (*Primula veris*) fl.
31. * Horse-chesnut (*Æsculus hippocastanum*) l.
Hairy violet (*Viola hirta*) fl.

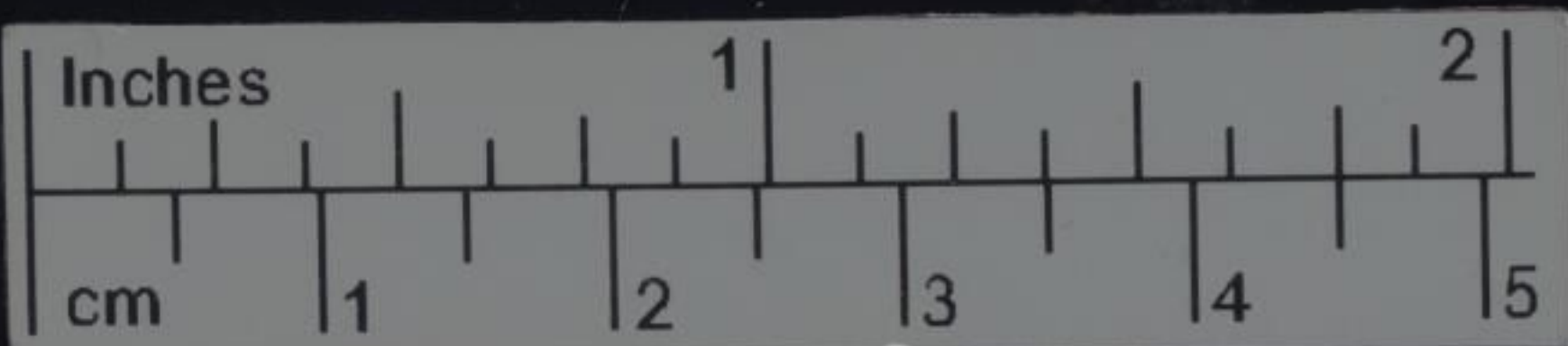


8

APRIL, XXX DAYS.

[1847.]

Month days.	Week days.	PHASES OF THE MOON.		Sun rises.	Sun sets.
		Last Quarter, 8th, 3 h. 26 m. aftern.	New moon, 15th, 6 22 morn.		
		First Quarter, 22nd, 9 9 morn.	Full moon, 30th, 1 26 aftern.		
		<i>Clock fast.</i>	<i>Clock slow.</i>		
		7th, 2 m. 17 s.	21st, 1 m. 16 s.		
		14th, 0 22	28th, 2 34		
				H M	H M
1	Th	<i>Maundy Thursday.</i> Zool. Soc. 3		5 38	6 31
2	F	<i>Good Friday.</i> Dillenius d. 1747		5 36	6 33
3	S	<i>Easter Eve.</i> Berkenhout d. 1791		5 33	6 35
4	C	<i>Easter Sunday</i>		5 31	6 36
5	M	Ent. Soc. 8. Chem. Soc. 8		5 29	6 38
6	Tu	Linn. Soc. 8. Hort. Soc. 3		5 27	6 39
7	W	Peter Camper d. 1789		5 24	6 41
8	Th			5 22	6 43
9	F	Lord Bacon d. 1626. Bot. Soc. 8		5 20	6 44
10	S	Roy. Bot. Soc. $\frac{1}{4}$ before 4		5 18	6 46
11	C	<i>1st Sunday after Easter.</i> Low Sund.		5 16	6 48
12	M	Geog. Soc. $\frac{1}{2}$ past 8		5 13	6 50
13	Tu	Zool. Soc. $\frac{1}{2}$ past 8		5 11	6 51
14	W	Geol. Soc. $\frac{1}{2}$ past 8. Pharm. Soc. 9		5 9	6 53
15	Th	Easter term begins. Roy. Soc. $\frac{1}{2}$ past 8		5 7	6 55
16	F	Buffon d. 1788. Roy. Inst. $\frac{1}{2}$ past 8		5 5	6 56
17	S	Franklin d. 1790. Asiatic Soc. 2		5 3	6 58
18	C	<i>2nd Sunday after Easter.</i> Darwin d.		5 0	6 59
19	M	Chem. Soc. 8 [1802]		4 58	7 1
20	Tu	Linn. Soc. 8. Hort. Soc. 3		4 56	7 3
21	W	Ethnol. Soc. 8. Mic. Soc. 8		4 54	7 4
22	Th	Roy. Soc. $\frac{1}{2}$ past 8		4 52	7 6
23	F	<i>St. George's Day.</i> Roy. Inst. $\frac{1}{2}$ past 8		4 50	7 8
24	S	Roy. Bot. Soc. $\frac{1}{4}$ before 4		4 48	7 9
25	C	<i>3rd Sunday after Easter.</i> St. Mark		4 46	7 11
26	M	Geog. Soc. $\frac{1}{2}$ past 8 [$\frac{1}{2}$ past 8]		4 44	7 12
27	Tu	Bruce, traveller, d. 1794. Zool. Soc.		4 42	7 14
28	W	Cotton b. 1630. Geol. Soc. $\frac{1}{2}$ past 8		4 40	7 16
29	Th	Roy. Soc. $\frac{1}{2}$ past 8. Zool. Soc. Ann. 1		4 38	7 17
30	F	Dr. Plott d. 1696. Roy. Inst. $\frac{1}{2}$ past 8		4 36	7 19



X DAYS. [1847]

MOON.

26 m. aftern.
22 morn.
9 morn.
26 aftern.

Clock slow.
st, 1 m. 16 s.
h, 2 34

ool. Soc. 3
s d. 1747
at d. 1791

8
3

l. Soc. 8

Low Sund.

arm. Soc. 9

. Soc. $\frac{1}{2}$ past 8

st. $\frac{1}{2}$ past 8

ic Soc. 2

r. Darwin d.

[1802]

3

c. 8

Inst. $\frac{1}{2}$ past 8

. St. Mark

[$\frac{1}{2}$ past 8

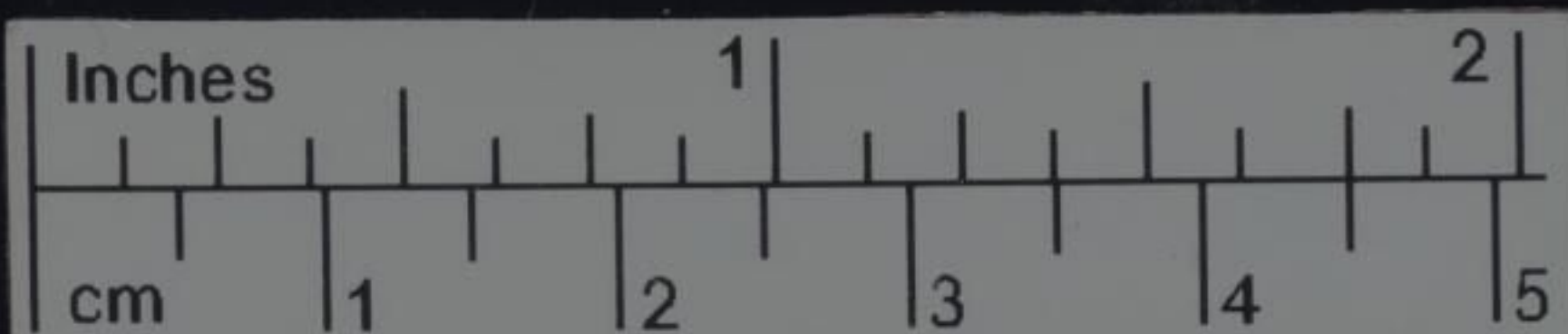
Zool. Soc.

ce. $\frac{1}{2}$ past 8

. Soc. Ann. 1

Inst. $\frac{1}{2}$ pas: 8

13th Minutes & later A.D.



1847.]

APRIL, XXX DAYS.

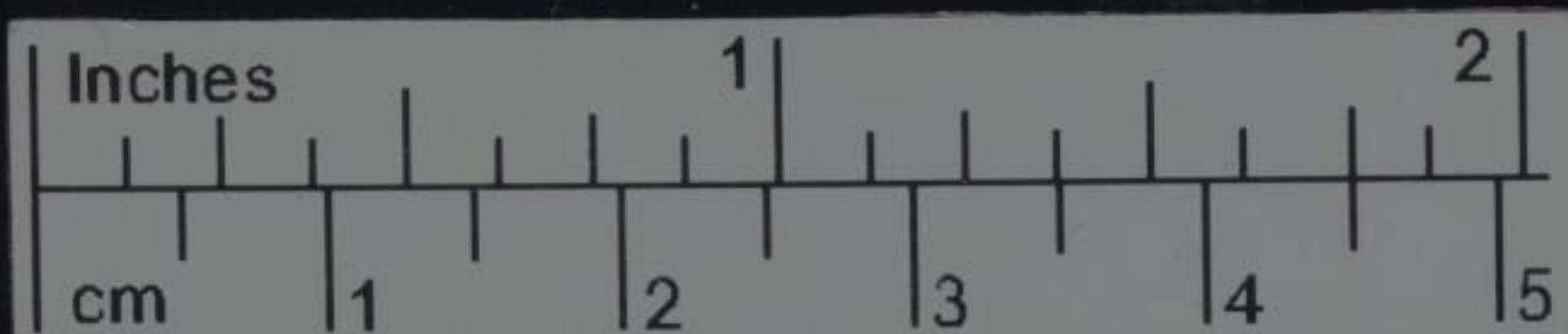
9

time will be fully occupied in watching and registering them, as they successively make their appearance. The most

2. Larch (*Larix europæa*) 1.
3. Chiff-chaff (*Sylvia hippolais*), note first heard.
* Ground-ivy (*Nepeta glechoma*) fl.
5. * Crown-imperial (*Fritillaria imperialis*) fl.
7. Blackbird (*Turdus merula*) lays.
* Common elm (*Ulmus campestris*) 1.
Blackthorn (*Prunus spinosa*) fl.
8. * Ringed snake (*Natrix torquata*) comes abroad.
9. * Birch (*Betula alba*) 1.
10. * House sparrow (*Passer domesticus*) builds.
11. Redbreast (*Erithaca rubecula*) lays.
* Common lizard (*Zootoca vivipara*) ap.
* Humble-bee fly (*Bombylius medius*) ap.
* Ash (*Fraxinus excelsior*) fl.
12. * Lime (*Tilia europæa*) 1.
* Sycamore (*Acer pseudo-platanus*) 1.
15. * Willow warbler (*Sylvia trochilus*) first heard.
* Redstart (*Phœnicura ruticilla*) first heard.
16. * Common snail (*Helix aspersa*) comes abroad.
Dog violet (*Viola canina*) fl.
18. Meadow lady's-smock (*Cardamine pratensis*) fl.
19. * Swallow (*Hirundo rustica*) first seen.
21. * Nightingale (*Philomela lusciniæ*) first heard.
23. * Large white butterfly (*Pontia brassicæ*) ap.
* Beech (*Fagus sylvatica*) 1.
Jack-by-the-hedge (*Alliaria officinalis*) fl.
24. * Wryneck (*Yunx torquilla*) first heard.
25. Buttercup (*Ranunculus bulbosus*) fl.
* German Iris (*Iris germanica*) fl.
26. * Lesser whitethroat (*Curruca sylvicola*) first heard.
* Strawberry (*Fragaria vesca*) fl.
27. * Cuckoo (*Cuculus canorus*) first heard.
Crab (*Pyrus malus*) fl.
29. * Barberry (*Berberis vulgaris*) fl.
Germander speedwell (*Veronica chamædrys*) fl.
* Sycamore (*Acer pseudo-platanus*) fl.
30. * Cuckoo-pint (*Arum maculatum*) fl.
* Lilac (*Syringa vulgaris*) fl.



10		MAY, XXXI DAYS.		[1847.]	
Month days.	Week days.	PHASES OF THE MOON.		Sun rises.	Sun sets.
		Last Quarter, 7th, 10 h. 49 m. aftern. New moon, 14th, 3 23 aftern. First Quarter, 22nd, 1 59 morn. Full moon, 30th, 2 46 morn.			
		Clock slow.			
		7th, 3 m. 38 s. 21st, 3 m. 44 s. 14th, 3 55 28th, 3 7			
				H M	H M
1	S	Hort. Soc. Ann. 1. R. Ins. Ann. ½ past 8		4 34	7 20
2	C	4th Sunday after Easter		4 32	7 22
3	M	Ent. Soc. 8. Chem. Soc. 8		4 31	7 24
4	Tu	Linn. Soc. 8. Hort. Soc. 3		4 29	7 25
5	W	Napoleon d. 1821		4 27	7 27
6	Th	Roy. Soc. ½ past 8. Zool. Soc. 3		4 25	7 29
7	F	Bot. Soc. 8. Roy. Inst. ½ past 8		4 24	7 30
8	S	Roy. Bot. Soc. ¼ bef. 4. Asia. Soc. An. 2		4 22	7 32
9	C	Rogation Sunday		4 20	7 33
10	M	Geog. Soc. ½ past 8		4 18	7 35
11	Tu	Camper b. 1722. Zool. Soc. ½ past 8		4 17	7 36
12	W	Geol. Soc. ½ past 8. Roy. Bot. Soc. Exh.		4 15	7 38
13	Th	Ascension Day. G. Cuvier d. 1832		4 14	7 39
14	F	Fahrenheit b. 1686. Roy. Ins. ½ past 8		4 12	7 41
15	S	Jussieu d. 1836		4 11	7 42
16	C	Sunday after Ascension [Soc. 8		4 9	7 44
17	M	Don Felix d. Azara b. 1746. Chem.		4 8	7 45
18	Tu	Pharm. Soc. 9		4 6	7 47
19	W	Ethnol. Soc. 8. Mic. Soc. 8		4 5	7 48
20	Th	Columbus d. 1506. Roy. Soc. ½ past 8		4 4	7 50
21	F	Roy. Inst. ½ past 8		4 2	7 51
22	S	Roy. Bot. Soc. ¼ before 4		4 1	7 53
23	C	Whit-Sunday. Ashmole b. 1617		4 0	7 54
24	M	Linn. Soc. Ann. 1. Geog. Soc. Ann. 1		3 59	7 55
25	Tu	Zool. Soc. ½ past 8		3 58	7 56
26	W	Geol. Soc. ½ past 8		3 56	7 58
27	Th			3 55	7 59
28	F	Sir H. Davy d. 1829. Roy. Inst. ½ past 8		3 54	8 0
29	S	Rest. of K. Charles II.		3 53	8 1
30	C	Trinity Sunday		3 52	8 2
31	M	Caleb Threlkeld, botanist, b. 1676		3 52	8 3



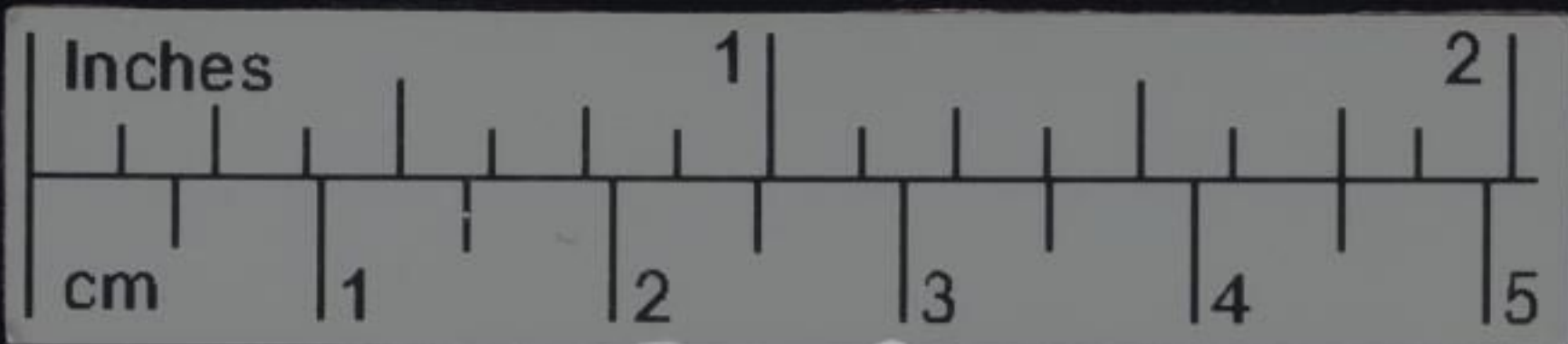
1847.]

MAY, XXXI DAYS.

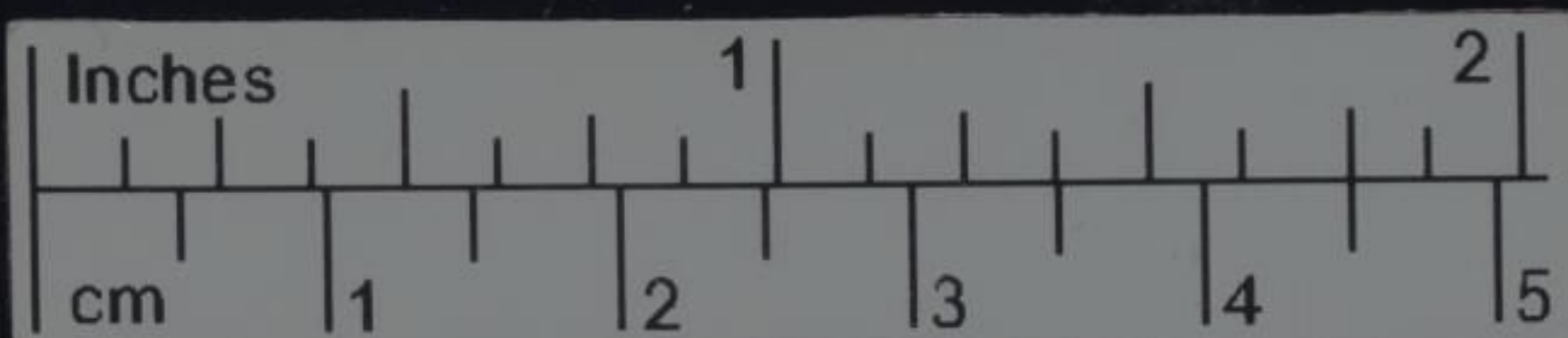
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important at these seasons relate to the periods of leafing and flowering, in trees and plants; the period of arrival of

2. Young rooks fledged.
 - * Oak (*Quercus robur*) l.
 - * Bladder-nut (*Staphylea pinnata*) fl.
3. * Horse-chesnut (*Æsculus hippocastanum*) fl.
4. Wood warbler (*Sylvia sibilatrix*) first heard.
5. * White-thorn (*Cratægus oxyacantha*) fl.
7. Mountain-ash (*Pyrus aucuparia*) fl.
 - * Red clover (*Trifolium pratensis*) fl.
8. * Turtle-dove (*Columba turtur*) first heard.
 - * Orange-tip butterfly (*Pontia cardamines*) ap.
9. Flesh-fly (*Sarcophaga carnaria*) ap.
10. Partridge (*Perdix cinerea*) lays.
11. * Laburnum (*Cytisus laburnum*) fl.
12. Wall butterfly (*Hipparchia megæra*) ap.
 - * Lily-of-the-valley (*Convallaria majalis*) fl.
13. * Swift (*Cypselus apus*) first seen.
 - English clary (*Salvia verbenacea*) fl.
 - Columbine (*Aquilegia vulgaris*) fl.
15. * Cockchaffer (*Melolontha vulgaris*) ap.
 - Pæony (*Pæonia officinalis*) fl.
16. * Spotted flycatcher (*Muscicapa grisola*) first seen.
 - * Upright crowfoot (*Ranunculus acris*) fl.
17. * May-fly (*Ephemera vulgata*) ap.
18. * Monk's-hood (*Aconitum napellus*) fl.
19. * Mulberry (*Morus nigra*) l.
 - Ragged-robin (*Lychnis flos-cuculi*) fl.
20. * Sailor-beetle (*Telephorus rusticus*) ap.
21. * Golden-green dragon-fly (*Calepteryx virgo*) ap.
22. White clover (*Trifolium repens*) fl.
23. Herb-Bennet (*Geum urbanum*) fl.
24. Small-heath butterfly (*Hipparchia pamphilus*) ap.
 - Mouse-ear hawkweed (*Hieracium pilosella*) fl.
25. Hive bee swarms.
26. Early purple orchis (*Orchis mascula*) fl.
27. * Ox-eye daisy (*Chrysanthemum leucanthemum*) fl.
30. Swallow-tail butterfly (*Papilio machaon*) ap.
 - Four-spotted drag.-fly (*Libellula quadrimaculata*) ap.
 - * Red bryony (*Bryonia dioica*) fl.



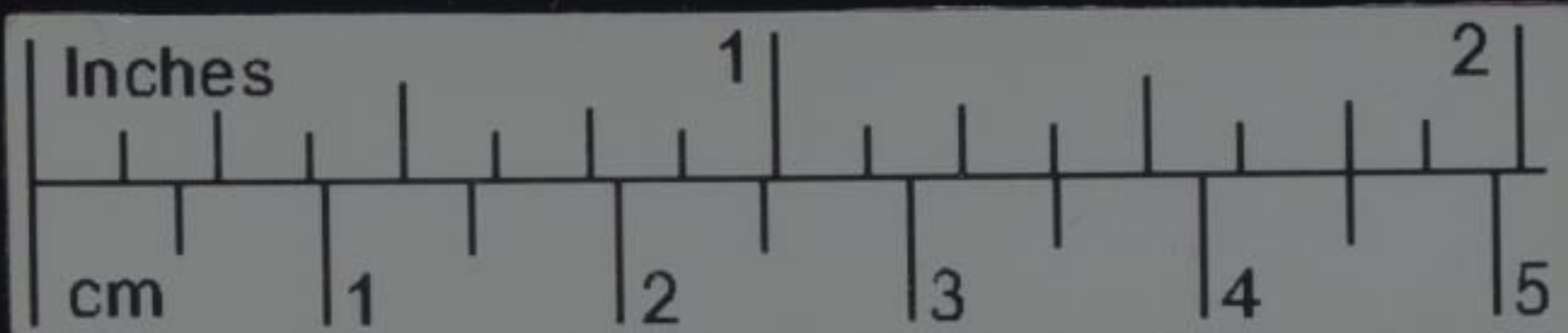
12		JUNE, XXX DAYS.		[1847.	
Month days.	Week days.	PHASES OF THE MOON.		Sun rises.	Sun sets.
		Last Quarter, 6th, 4 h. 6 m. morn. New moon, 13th, 0 52 morn. First Quarter, 20th, 7 32 aftern. Full moon, 28th, 1 23 aftern.			
		<i>Clock slow.</i> 7th, 1 m. 37 s. 14th, 0 14	<i>Clock fast.</i> 21st, 1 m. 17 s. 28th, 2 46		
1	Tu	Jer. Bentham d. 1832. Linn. Soc. 8.		H M	H M
2	W	[Hort. Soc. 3		3 51	8 5
3	Th	Roy. Soc. $\frac{1}{2}$ past 8. Zool. Soc. 3		3 50	8 6
4	F	Bot. Soc. 8. Roy. Inst. $\frac{1}{2}$ past 8		3 49	8 7
5	S	Asiatic Soc. 2		3 48	8 8
6	C	1st Sunday after Trinity		3 48	8 9
7	M	Ent. Soc. 8		3 47	8 10
8	Tu	Zool. Soc. $\frac{1}{2}$ past 8 [Soc. 9. R.B.S. Ex.		3 47	8 11
9	W	Eth. Soc. 8. Geol. Soc. $\frac{1}{2}$ past 8. Phar.		3 46	8 11
10	Th	Roy. Soc. $\frac{1}{2}$ past 8		3 46	8 12
11	F	St. Barnabas		3 45	8 13
12	S	Roy. Bot. Soc. $\frac{1}{4}$ before 4		3 45	8 14
13	C	2nd Sunday after Trinity		3 45	8 14
14	M	Pennant b. 1726. Geog. Soc. $\frac{1}{2}$ past 8		3 44	8 15
15	Tu	Fourcroy b. 1755. Linn. Soc. 8		3 44	8 15
16	W	Geol. Soc. $\frac{1}{2}$ past 8		3 44	8 16
17	Th	Roy. Soc. $\frac{1}{2}$ past 8		3 44	8 16
18	F	Battle of Waterloo, 1815		3 44	8 17
19	S	Sir J. Banks d. 1820. Asiatic Soc. 2		3 44	8 17
20	C	3rd Sunday after Trinity. Accession		3 44	8 18
21	M	Longest day [$\frac{1}{2}$ past 8		3 44	8 18
22	Tu	Summer Quarter begins. Zool. Soc.		3 44	8 18
23	W	Leibnitz b. 1646. Mic. Soc. 8		3 45	8 18
24	Th	St. John Baptist. Midsummer Day		3 45	8 19
25	F	No real night till July 15th		3 45	8 19
26	S	Roy. Bot. Soc. $\frac{1}{4}$ before 4		3 46	8 19
27	C	4th Sunday after Trlnity. Dr. La-		3 46	8 19
28	M	[tham, Ornithologist, b. 1740		3 47	8 18
29	Tu	St. Peter		3 47	8 18
30	W	Werner d. 1817		3 48	8 18



[1847.

Sun rises.		Sun sets.	
H	M	H	M
3	51	8	5
3	50	8	6
3	49	8	7
3	48	8	8
3	48	8	9
3	47	8	10
3	47	8	11
3	46	8	11
3	46	8	12
3	45	8	13
3	45	8	14
3	45	8	14
3	44	8	15
3	44	8	15
3	44	8	16
3	44	8	16
3	44	8	17
3	44	8	17
3	44	8	18
3	44	8	18
3	44	8	18
3	45	8	18
3	45	8	19
3	45	8	19
3	46	8	19
3	46	8	19
3	47	8	18
3	47	8	18
3	48	8	18

22⁹
~~22~~ - B.M. - after.



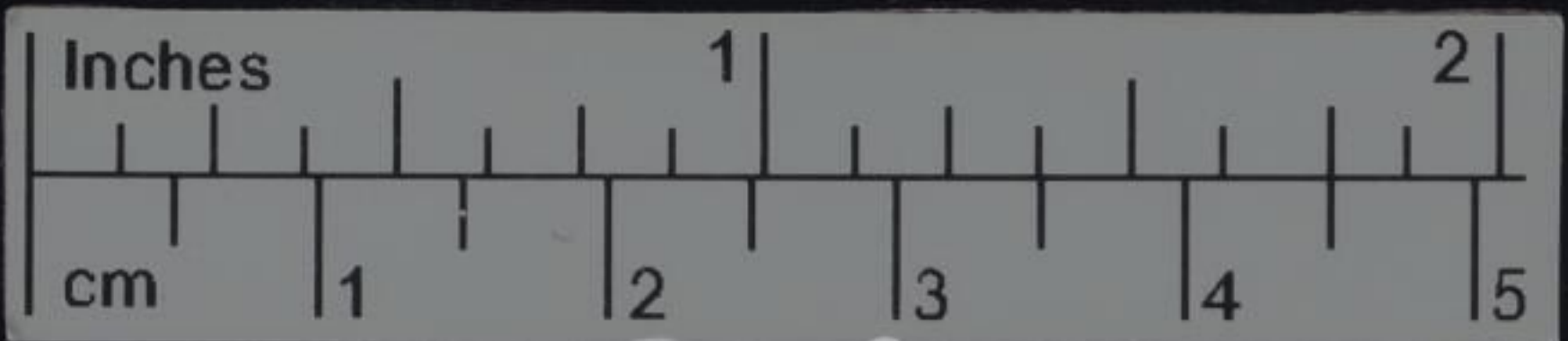
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JUNE, XXX DAYS.

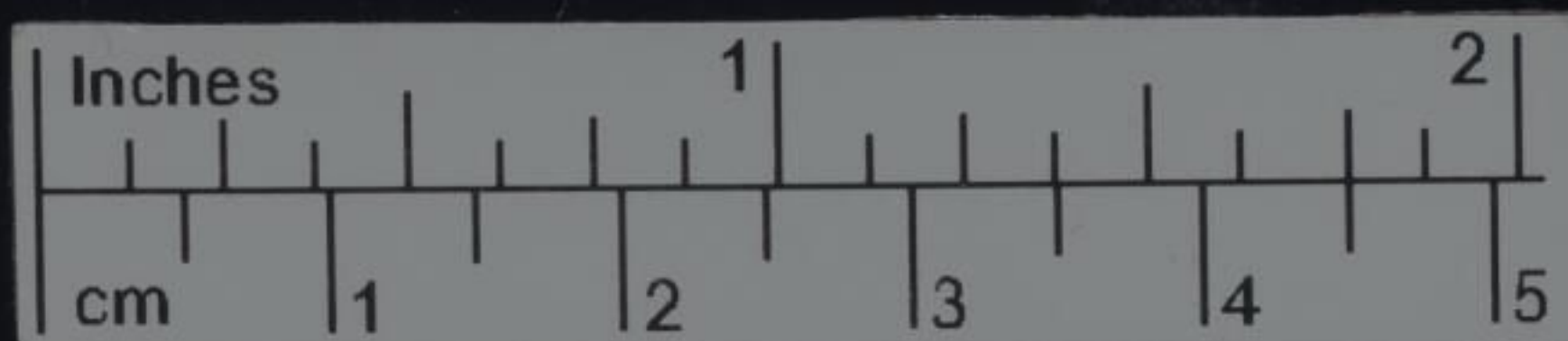
13

our summer birds of passage; the periods of commencing and ceasing song, as also of building and incubation, in

1. * Common elder (*Sambucus nigra*) fl.
3. Common red poppy (*Papaver rhœas*) fl.
4. Cow-parsnip (*Heracleum sphondylium*) fl.
5. * Common blue butterfly (*Polyommatus alexis*) ap.
6. Young broods of pheasants hatched.
Bladder-campion (*Silene inflata*) fl.
7. Nightingale (*Philomela lusciniæ*), song ceases.
* Saintfoin (*Onobrychis sativa*) fl.
8. * Common honeysuckle (*Lonicera periclymenum*) fl.
9. Dog-rose (*Rosa canina*) fl.
10. * Silver Y moth (*Plusia gamma*) ap.
11. * Common mallow (*Malva sylvestris*) fl.
* Great snapdragon (*Antirrhinum majus*) fl.
12. Musk thistle (*Carduus nutans*) fl.
13. * Woody nightshade (*Solanum dulcamara*) fl.
14. Landrail (*Crex pratensis*) lays.
Moss rose (*Rosa muscosa*) fl.
15. Black knapweed (*Centaurea nigra*) fl.
17. * Meadow crane's-bill (*Geranium pratensis*) fl.
18. Forget-me-not (*Myosotis palustris*) fl.
19. * Meadow-brown butterfly (*Hipparchia janira*) ap.
Bee orchis (*Ophrys apifera*) fl.
20. Self-heal (*Prunella vulgaris*) fl.
21. Young broods of partridges hatched.
* Fox-glove (*Digitalis purpurea*) fl.
22. Biting stonecrop (*Sedum acre*) fl.
* Strawberries ripe.
23. * Wheat (*Triticum hybernum*) fl.
Stinking horehound (*Ballota nigra*) fl.
24. May-weed (*Anthemis cotula*) fl.
25. * Common wasp (*Vespa vulgaris*) begins to abound.
* Tawny day-lily (*Hemerocallis fulva*) fl.
26. Privet hawk-moth (*Sphinx ligustri*) ap.
27. Cuckoo (*Cuculus canorus*) last heard.
* Privet (*Ligustrum vulgare*) fl.
28. * Great plantain (*Plantago major*) fl.
29. Great knapweed (*Centaurea scabiosa*) fl.
30. * Millefoil (*Achillea millefolium*) fl.
Meadow-sweet (*Spiræa ulmaria*) fl.



14		JULY, XXXI DAYS.		[1847.]	
Month days.	Week days.	PHASES OF THE MOON.		Sun rises.	Sun sets.
		Last Quarter, 5th, 8 h. 42 m. morn. New moon, 12th, 11 38 morn. First Quarter, 20th, 0 52 aftern. Full moon, 27th, 10 8 aftern.			
		<i>Clock fast.</i>			
		7th, 4 m. 27 s.	21st, 6 m. 3 s.		
		14th, 5 27	28th, 6 11		
				H M	H M
1	Th	Walter born 1793. Zool. Soc. 3		3 48	8 18
2	F	Bot. Soc. 8		3 49	8 17
3	S	Dog days begin. Willughby d. 1671		3 50	8 17
4	C	5th Sunday after Trinity		3 51	8 17
5	M	Sir T. S. Raffles b. 1781. Ent. Soc. 8		3 52	8 16
6	Tu	Wilson, ornith., b. 1766. Hort. Soc. 3		3 53	8 16
7	W	Roy. Bot. Soc. Exhibition		3 53	8 15
8	Th	Burke d. 1797		3 54	8 14
9	F	Camb. East. term ends		3 55	8 14
10	S	Oxf. term ends. Roy. Bot. Soc. $\frac{1}{4}$ bef. 4		3 56	8 13
11	C	6th Sunday after Trinity		3 57	8 12
12	M			3 58	8 12
13	Tu	Zool. Soc. $\frac{1}{2}$ past 8		3 59	8 11
14	W	Gaertner d. 1791. Pharm. Soc. 9		4 0	8 10
15	Th	St. Swithin		4 2	8 9
16	F	Sir J. Reynolds b. 1723		4 3	8 8
17	S	Dr. Watts b. 1674		4 4	8 7
18	C	7th Sunday after Trinity. Gilbert		4 5	8 6
19	M	[White b. 1720]		4 7	8 4
20	Tu	Playfair d. 1819		4 8	8 3
21	W	Burns b. 1759		4 9	8 2
22	Th	Dr. George Shaw d. 1813		4 10	8 0
23	F	Edwards, naturalist, d. 1773		4 12	7 59
24	S	Roy. Bot. Soc. $\frac{1}{4}$ before 4		4 13	7 58
25	C	8th Sunday after Trinity. St. James		4 15	7 57
26	M			4 16	7 55
27	Tu	Zool. Soc. $\frac{1}{2}$ past 8		4 17	7 54
28	W			4 19	7 52
29	Th			4 20	7 51
30	F	Graaf b. 1641 [Severn		4 22	7 49
31	S	Salmon fishing ends in the Wye and		4 23	7 48

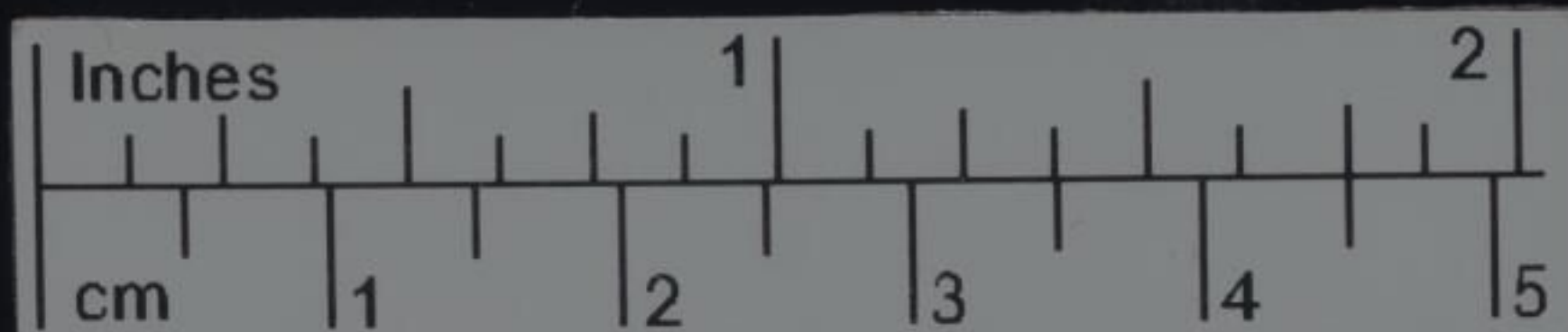


[1847.

		Sun rises.	Sun sets.
		H M	H M
		3 48	8 18
		3 49	8 17
1		3 50	8 17
		3 51	8 17
8		3 52	8 16
3		3 53	8 16
		3 53	8 15
		3 54	8 14
		3 55	8 14
f. 4		3 56	8 13
		3 57	8 12
		3 58	8 12
		3 59	8 11
		4 0	8 10
		4 2	8 9
		4 3	8 8
		4 4	8 7
ert		4 5	8 6
20		4 7	8 4
		4 8	8 3
		4 9	8 2
		4 10	8 0
		4 12	7 59
		4 13	7 58
mes		4 15	7 57
		4 16	7 55
		4 17	7 54
		4 19	7 52
		4 20	7 51
rn		4 22	7 49
nd		4 23	7 48

17th And Soc - Chink

Ready show



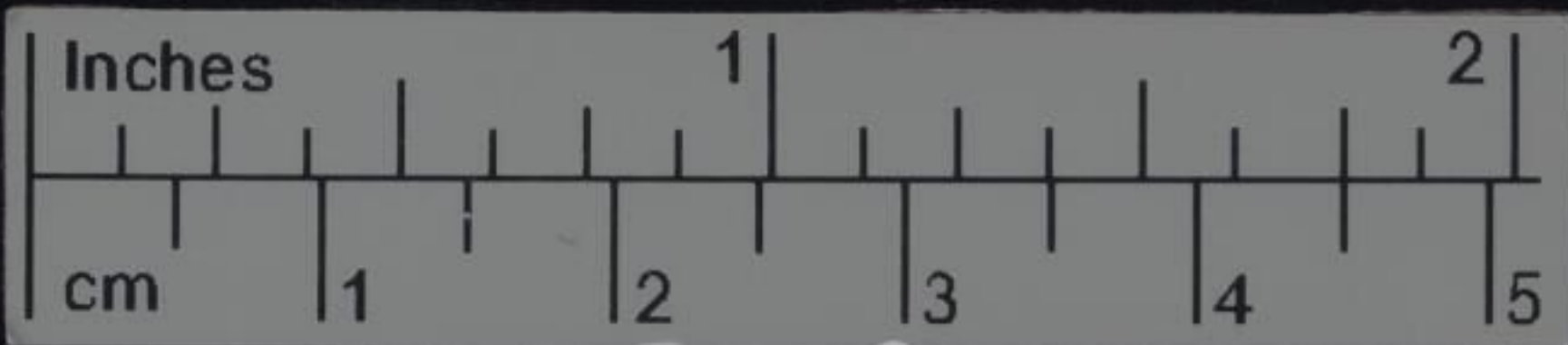
1847.]

JULY, XXXI DAYS.

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birds; and, lastly, the period of the first appearance abroad, after winter, of certain mammals, reptiles, and insects.

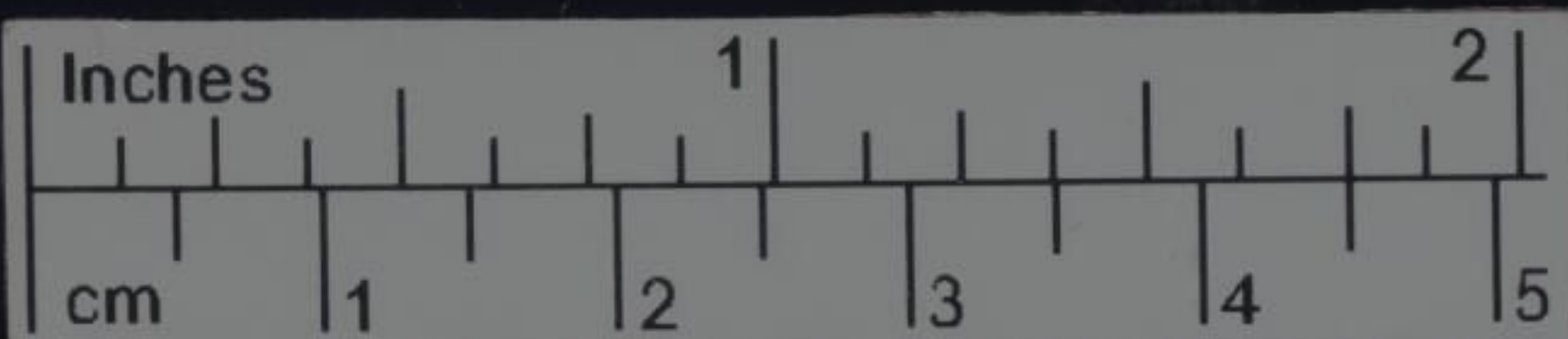
1. Blackberry (*Rubus fruticosus*) fl.
2. Rooks return to their nest trees to roost.
* Lime (*Tilia europæa*) fl.
3. Young frogs come on land.
Ragwort (*Senecio jacobæa*) fl.
4. * Common St. John's wort (*Hypericum perforatum*) fl.
5. Chaffinch (*Fringilla cœlebs*), song ceases.
* White lily (*Lilium candidum*) fl.
6. * Midsummer-dor (*Melolontha solstitialis*) ap.
7. Glow-worm (*Lampyrus noctiluca*) shines.
White jasmine (*Jasminum officinale*) fl.
8. Everlasting pea (*Lathyrus latifolius*) fl.
* Great bindweed (*Convolvulus sepium*) fl.
9. Trees make their Midsummer shoots.
10. Wild succory (*Cichorium intybus*) fl.
* Cat-mint (*Nepeta cataria*) fl.
11. * Purple loose-strife (*Lythrum salicaria*) fl.
12. Magpie moth (*Abraxas grossulariata*) ap.
Traveller's-joy (*Clematis vitalba*) fl.
14. * Clove pink (*Dianthus caryophyllus*) fl.
15. * Vervain (*Verbena officinalis*) fl.
16. Large heath butterfly (*Hipparchia tithonus*) ap.
Great willow-herb (*Epilobium hirsutum*) fl.
17. Tutsan (*Hypericum androsæmum*) fl.
18. Cotton-thistle (*Onopordum acanthium*) fl. [ap.
19. Humming-bird hawk-moth (*Macroglossa stellatarum*)
Spear-thistle (*Carduus lanceolatus*) fl.
20. Garden tiger-moth (*Arctia caja*) ap.
22. Hemp-agrimony (*Eupatorium cannabinum*) fl.
24. Flea-bane (*Pulicaria dysenterica*) fl.
25. * Great green acrida (*Acrida viridissima*), stridulous
* Apricots ripe. [note heard.
27. Wild teazel (*Dipsacus sylvestris*) fl.
Hairy mint (*Mentha sativa*) fl.
28. Admiral butterfly (*Vanessa atalanta*) ap.
29. * Common grasshopper (*Locusta biguttula*) crinks.
30. Gipsy-wort (*Lycopus europæus*) fl.
31. Wild angelica (*Angelica sylvestris*) fl.



16		AUGUST, XXXI DAYS.		[1847.	
Month days.	Week days.	PHASES OF THE MOON.		Sun rises.	Sun sets.
		Last Quarter, 3rd, 1 h. 59 m. aftern. New moon, 11th, 0 28 morn. First Quarter, 19th, 5 1 morn. Full moon, 26th, 6 9 morn			
		Clock fast.			
		7th, 5 m. 33 s.	21st, 3 m. 4 s.		
		14th, 4 32	28th, 1 12		
				H M	H M
1	C	9th Sunday after Trinity. Lammas		4 25	7 46
2	M	Ent. Soc. 8 [Day		4 26	7 44
3	Tu	Hort. Soc. 3		4 28	7 43
4	W			4 29	7 41
5	Th	Oyster season begins. Zool. Soc. 3		4 31	7 40
6	F	Bloch, ichthyologist, d. 1799. Bot.		4 32	7 38
7	S	[Soc. 8		4 34	7 36
8	C	10th Sunday after Trinity. Gmelin		4 35	7 34
9	M	[b. 1748		4 37	7 32
10	Tu	Zool. Soc. ½ past 8. R. Bot. Soc. An. 1		4 38	7 31
11	W	Dog-days end. Dr. Mead b. 1673		4 40	7 29
12	Th	Grouse shooting beg. Bewick b. 1753		4 42	7 27
13	F	Queen Adelaide b. 1792		4 43	7 25
14	S	Printing invented 1437		4 45	7 23
15	C	11th Sunday after Trinity		4 46	7 21
16	M			4 48	7 19
17	Tu			4 49	7 17
18	W	Beattie d. 1803		4 51	7 15
19	Th	Merrett d. 1695		4 53	7 13
20	F	Black game shooting commences		4 54	7 11
21	S	Count Rumford d. 1814		4 56	7 9
22	C	12th Sunday after Trinity		4 57	7 7
23	M	G. Cuvier b. 1769		4 59	7 5
24	Tu	St. Bartholomew. Zool. Soc. ½ past 8		5 1	7 3
25	W	Dr. Leach d. 1836		5 2	7 0
26	Th	Prince Albert b. 1819		5 4	6 58
27	F	Wolfe, the last of the Alchymists, d. 1806		5 5	6 56
28	S	Dr. William Smith, d. 1840 [1630		5 7	6 54
29	C	13th Sunday after Trinity. Locke b.		5 9	6 52
30	M	Paley b. 1743		5 10	6 50
31	Tu			5 12	6 47

16th
17th
18th
19th
20th
21st
22nd
23rd
24th
25th
26th
27th
28th
29th
30th
31st

16th
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31st

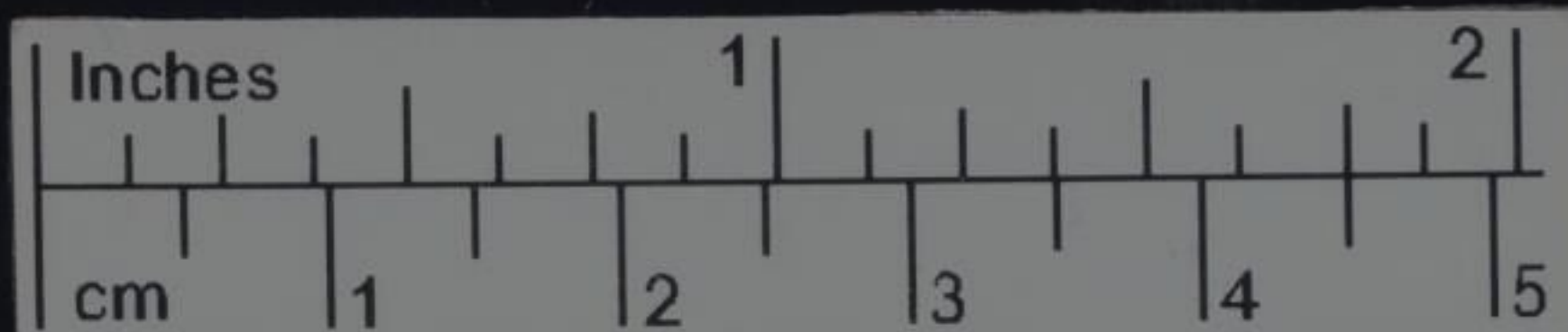


DAYS. [1847.

	Sun rises.	Sun sets.
aftern.		
morn.		
morn.		
morn.		
4 s.		
12		
	H M	H M
mas	4 25	7 46
Day	4 26	7 44
	4 28	7 43
	4 29	7 41
3	4 31	7 40
Bot.	4 32	7 38
oc. 8	4 34	7 36
elin	4 35	7 34
1748	4 37	7 32
An. 1	4 38	7 31
3	4 40	7 29
1753	4 42	7 27
	4 43	7 25
	4 45	7 23
	4 46	7 21
	4 48	7 19
	4 49	7 17
	4 51	7 15
	4 53	7 13
	4 54	7 11
	4 56	7 9
	4 57	7 7
	4 59	7 5
past 8	5 1	7 3
	5 2	7 0
	5 4	6 58
d. 1806	5 5	6 56
[1630	5 7	6 54
ocke b.	5 9	6 52
	5 10	6 50
	5 12	6 47

~~16th Cable to Loh. U. Rail~~
17th Gate repaired

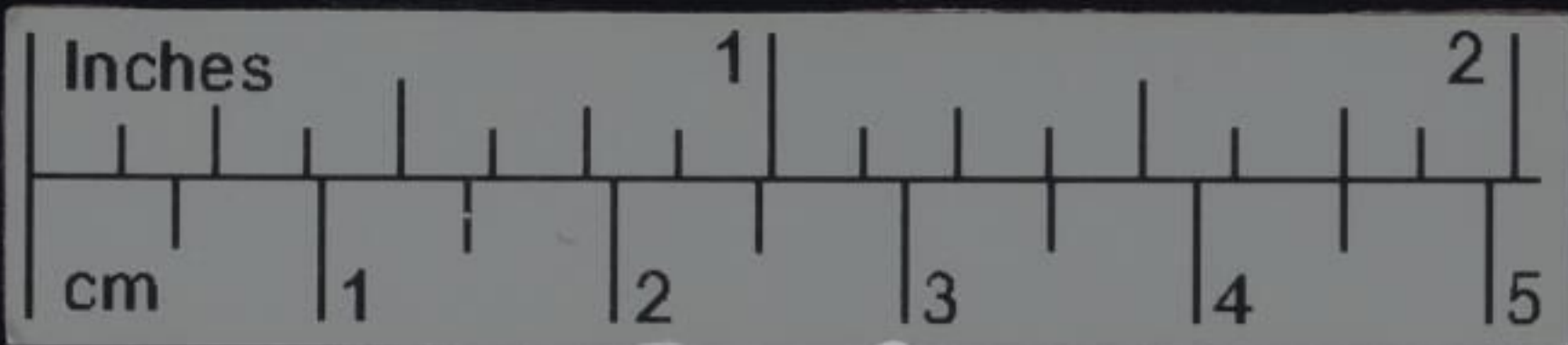
20th got Kew
24th π. Gate to be repaired
25th Hooker to Scotland



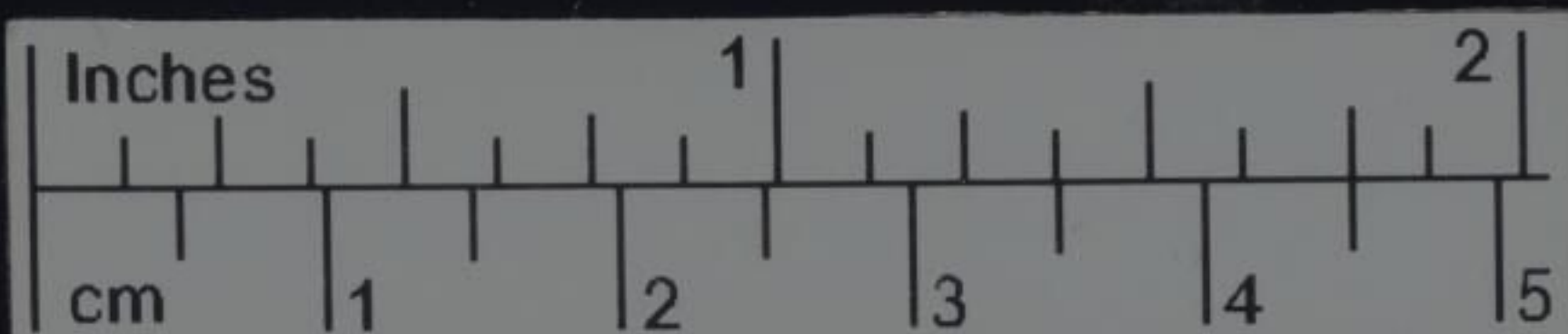
The period of leafing in trees and shrubs, or the season of *foliation*, may be said to commence, in the case of a few species, in February (rarely in January), and to get to its height in April; continuing on from that time to the beginning or middle of May. The phenomenon should be dated from the time when the leaves are so far expanded as to bring their upper surface into contact with the atmosphere, this being the moment at which their vital functions first come into action. At or about Midsummer, a second leafing takes place with many trees,—and the occurrence of this phenomenon should be also carefully noted, as being in connexion with the period of the beginning of summer, and of the greatest heat.

The period of the flowering of plants keeps continually increasing from the commencement of the new year to the months of June and July, in which last month it reaches its maximum, declining rapidly afterwards through August and September. In general the date of flowering may be

1. Second broods of swallows fledged.
Wormwood (*Artemisia absinthium*) fl.
2. Large-flowered hemp-nettle (*Galeopsis versicolor*) fl.
4. Mugwort (*Artemisia vulgaris*) fl.
6. * Honey-suckle berries ripe.
8. * Swift (*Cypselus apus*) last seen.
Hornet-fly (*Asilus crabroniformis*) ap.
9. Red goose-foot (*Chenopodium rubrum*) fl.
12. * Swallows and martins begin to congregate.
Soapwort (*Saponaria officinalis*) fl.
13. Second broods of house martins fledged.
16. * Artichoke (*Cynara scolymus*) fl.
18. * Devil's-bit scabious (*Scabiosa succisa*) fl.
* Bracts of the lime fall.
19. Common tansy (*Tanacetum vulgare*) fl.
20. Redbreast (*Erithaca rubecula*), song re-assumed.
Small-copper butterfly (*Lycæna phlæas*) ap.
24. * Starlings collect in flocks.
25. * Winged ants migrate.
30. * Red bryony berries ripe.
31. Autumnal gentian (*Gentiana amarella*) fl.
* Peaches ripe.



18		SEPTEMBER, XXX DAYS. [1847.		
Month days.	Week days.	PHASES OF THE MOON.	Sun rises.	Sun sets.
		Last Quarter, 1st, 9 h. 14 m. aftern. New moon, 9th, 3 47 aftern. First Quarter, 17th, 7 21 aftern. Full moon, 24th, 2 25 aftern. <i>Clock slow.</i> 7th, 1 m. 56 s. 21st, 6 m. 48 s. 14th, 4 20 28th, 9 12		
			H M	H M
1	W	Partridge shooting begins	5 13	6 45
2	Th	Zool. Soc. 3	5 15	6 43
3	F	Lawrence Bellini b. 1643. Bot. Soc. 8	5 17	6 41
4	S		5 18	6 39
5	C	14th Sunday after Trinity	5 20	6 36
6	M	Ent. Soc. 8.	5 21	6 34
7	Tu	Buffon b. 1709. Hort. Soc. 3	5 23	6 32
8	W	Pallas d. 1811	5 25	6 30
9	Th	[Thames	5 26	6 27
10	F	Salmon and trout fishing ends in the	5 28	6 25
11	S	Thompson, poet, b. 1700	5 29	6 23
12	C	15th Sunday after Trinity	5 31	6 20
13	M	Fox d. 1806 [Soc. ½ past 8	5 33	6 18
14	Tu	Salm. fishing ends in Scotland. Zool.	5 34	6 16
15	W	Liverp. & Man. Railway opened, 1830	5 36	6 13
16	Th	Kæmpfer b. 1651	5 37	6 11
17	F		5 38	6 9
18	S	Watts' Steam-engine first erected 1775	5 41	6 6
19	C	16th Sunday after Trinity	5 42	6 4
20	M		5 44	6 2
21	Tu	St. Matthew	5 45	6 0
22	W	Pallas b. 1741	5 47	5 57
23	Th	Autumnal Qr. beg. Boerhaave d. 1738	5 49	5 55
24	F	Samuel Butler d. 1680	5 50	5 53
25	S	Werner b. 1750	5 52	5 50
26	C	17th Sunday after Trinity	5 53	5 48
27	M	Artedi, ichthyologist, d. 1735	5 55	5 46
28	Tu	Zool. Soc. ½ past 8	5 57	5 44
29	W	Michaelmas Day	5 58	5 41
30	Th	Salmon fishing ends in the Liffy	5 59	5 39



1847.] SEPTEMBER, XXX DAYS.

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registered when the corolla or blossom is sufficiently open to shew the anthers; though there are a few plants, like the columbine, in the case of which, from the construction of the parts of the flower, this rule cannot strictly be availed of.

With regard to birds, the arrival of the summer migrants takes place principally in April, a few shewing themselves in March, whilst a few others are not seen till May. The singing of the smaller *Passeres* commences with the new year, or shortly afterwards, according to the weather: the numbers that may be heard keep continually increasing till the beginning of May, by which time they are all in full song. As those species which spend only the summer with us commence singing immediately on their arrival, the dates of occurrence of these two phenomena, in the case of such species, will be generally synchronous.

The spring months of March, April, May and June, are the chief months in which birds are engaged in nidification.

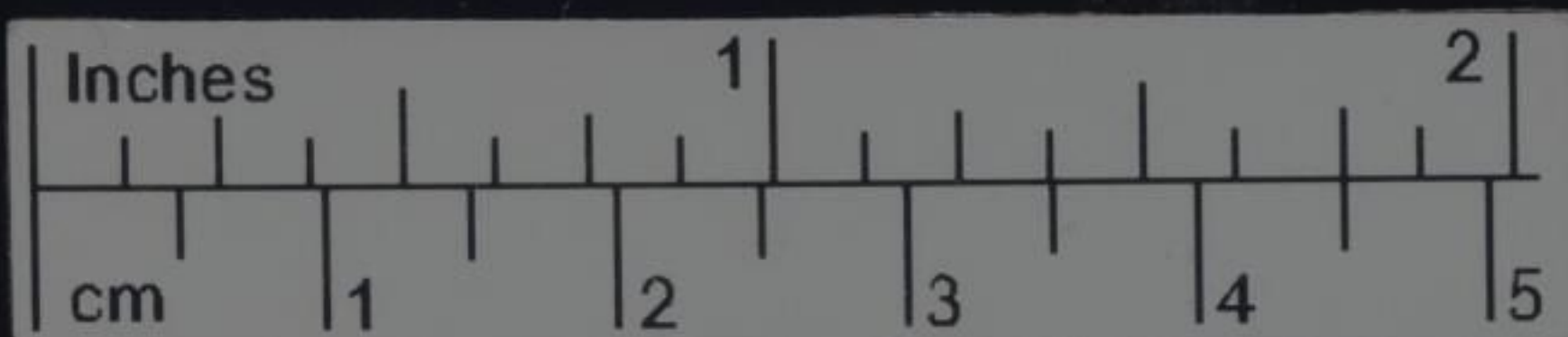
1. Clouded-yellow butterfly (*Colias edusa*) ap.
2. Chaffinch (*Fringilla cœlebs*), song re-assumed.
* Barberries ripe.
3. * Meadow-saffron (*Colchicum autumnale*) fl.
5. * Hawthorn berries ripe.
6. Gossamer floats.
7. * Red-underwing moth (*Catocala nupta*) ap.
13. * Elder-berries ripe.
15. Vapourer moth (*Orgyia antiqua*) ap.
16. Lime turns yellow.
18. Peewits collect in flocks.
Goldfinches collect in flocks.
19. Dotterel makes its autumnal passage.
20. Syringa (*Philadelphus coronarius*) turns yellow.
21. Drone-fly (*Eristalis tenax*) enters houses.
22. Lime leaves begin to fall.
23. Herald moth (*Calyptra libatrix*) ap.
24. Beech-mast falls.
26. * Ivy (*Hedera helix*) fl.
28. Laurestine (*Viburnum tinus*) fl.
29. * Martins (*Hirundo urbica*), bulk departed.
Autumn-green-carpet moth (*Harpalyce miata*) ap.



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OCTOBER, XXXI DAYS. [1847.]

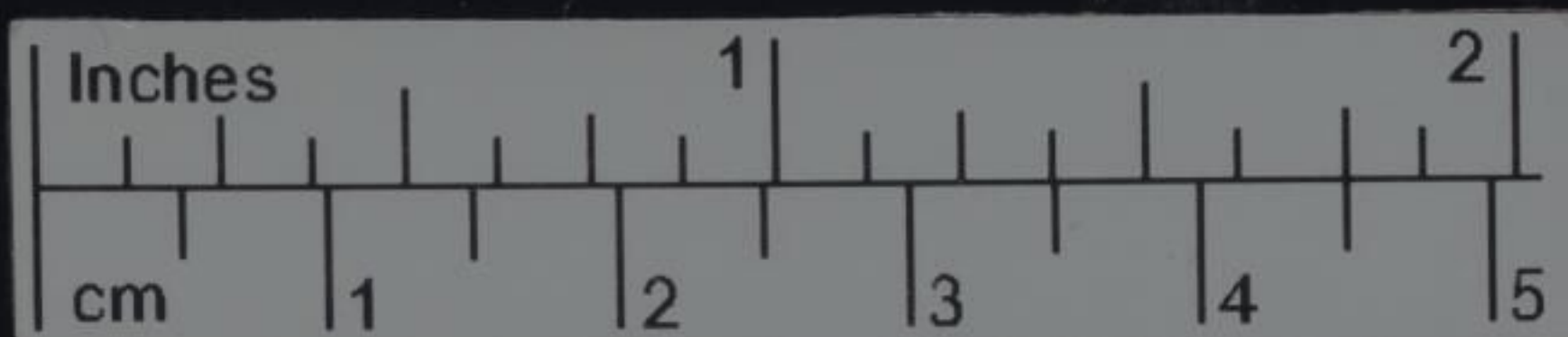
Month days.	Week days.	PHASES OF THE MOON. Last Quarter, 1st, 7 h. 36 m. morn. New moon, 9th, 9 7 morn. First Quarter, 17th, 7 41 morn. Full moon, 23rd, 11 36 aftern. Last Quarter, 30th, 9 56 aftern. Clock slow. 7th, 12 m. 0 s. 21st, 15 m. 12 s. 14th, 13 49 28th, 16 3	Sun rises.		Sun sets.	
			H	M	H	M
1	F	Pheasant shooting begins. Bot. Soc. 8	6	1	5	36
2	S		6	3	5	34
3	C	18th Sunday after Trinity	6	5	5	32
4	M	Ent. Soc. 8	6	7	5	30
5	Tu	Hort. Soc. 3	6	8	5	28
6	W	Lacepede d. 1825	6	10	5	25
7	Th	Zimmerman d. 1793. Zool. Soc. 3	6	12	5	23
8	F	Dr. Kippis d. 1795	6	13	5	21
9	S	Fallopious d. 1762. Eclipse of the sun	6	15	5	19
10	C	19th Sun. after Trin. Cam. term beg.	6	17	5	17
11	M	Old Michaelmas Day. Oxf. term beg.	6	18	5	14
12	Tu	Zool. Soc. $\frac{1}{2}$ past 8	6	20	5	12
13	W	Mic. Soc. 8.	6	22	5	10
14	Th	Salmon fishing ends in the Usk	6	24	5	8
15	F	Vesalius d. 1564. John Ellis d. 1776	6	25	5	6
16	S	Tweednet-fishing ends. Haller b. 1708	6	27	5	4
17	C	20th Sunday after Trinity	6	29	5	2
18	M	St. Luke. Fox hunting begins	6	30	4	59
19	Tu	Dean Swift d. 1745	6	32	4	57
20	W	Sir Christopher Wren b. 1632	6	34	4	55
21	Th	Nelson killed 1805	6	36	4	53
22	F	Marcet d. 1821	6	37	4	51
23	S		6	39	4	49
24	C	21st Sunday after Trinity. Leuwen-	6	41	4	47
25	M	[hoek b. 1632	6	43	4	45
26	Tu	N. A. Vigors d. 1840. Zool. Soc. $\frac{1}{2}$ past 8	6	44	4	43
27	W	Hogarth d. 1764	6	46	4	41
28	Th	St. Simon & St. Jude. Sibthorp b. 1758	6	48	4	39
29	F	Hare hunting begins	6	50	4	37
30	S	Alfred the Great d. 900	6	52	4	35
31	C	22nd Sunday after Trinity	6	53	4	33



AYS. [1847.

	Sun rises.		Sun sets.	
	H	M	H	M
c. 8	6	1	5	36
	6	3	5	34
	6	5	5	32
	6	7	5	30
	6	8	5	28
	6	10	5	25
	6	12	5	23
	6	13	5	21
un	6	15	5	19
eg.	6	17	5	17
eg.	6	18	5	14
	6	20	5	12
	6	22	5	10
	6	24	5	8
6	6	25	5	6
708	6	27	5	4
	6	29	5	2
	6	30	4	59
	6	32	4	57
	6	34	4	55
	6	36	4	53
	6	37	4	51
	6	39	4	49
n-	6	41	4	47
32	6	43	4	45
8	6	44	4	43
	6	46	4	41
58	6	48	4	39
	6	50	4	37
	6	52	4	35
	6	53	4	33

28. Tides



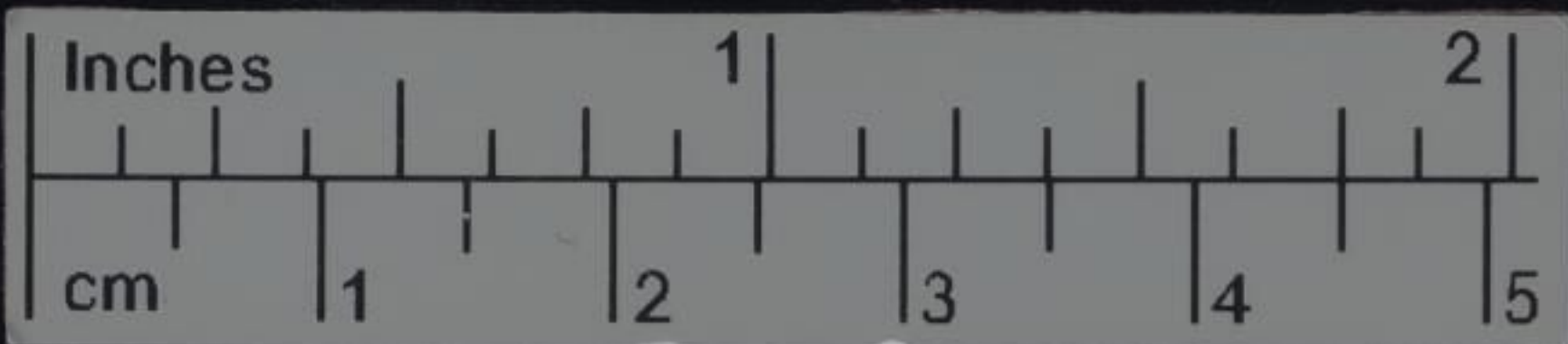
1847.] OCTOBER, XXXI DAYS. 21

About, or within two or three weeks after, Midsummer, many of our songsters become silent: those that continue to be heard are mostly such as have two or more broods during the season.

Of insects there is a constant succession, nearly throughout the year, though the species are most abundant, as might be expected, during summer. It is especially in the months of June and July that the appearance of the Lepidoptera, or moths and butterflies, attains its maximum.

After the commencement of August, the number of periodic phenomena, worthy of registration, becomes very much reduced, whilst in many respects they are of a different kind from those which occur at an earlier period of the year. The season of flowering gives place to that of fruiting: the

1. Horse-chesnut leaves begin to fall.
2. Walnut leaves begin to fall.
3. Jack-snipe (*Scolopax gallinula*) arrives.
4. * Linnets (*Linota cannabina*) collect in flocks.
Sloes ripe.
Horse-chesnuts fall.
5. Virginia-creeper (*Ampelopsis hederacea*) turns red.
Trees in general assume their autumnal tints.
6. Buntings (*Emberiza miliaria*) collect in flocks.
7. Beech leaves begin to fall.
8. White poplar leaves begin to fall.
9. Hazel turns yellow.
11. Ash leaves begin to fall.
12. Honeysuckle leaves fall.
14. * Swallow (*Hirundo rustica*) last seen.
Lady-bird (*Coccinella septempunctata*) hibernates.
16. * Martin (*Hirundo urbica*) last seen.
17. Dogwood turns red.
18. * Lime stripped of its leaves.
21. * Walnut stripped of its leaves.
24. Golden plover (*Charadrius pluvialis*) arrives.
25. Short-eared owl (*Otus brachyotos*) arrives.
28. * Flocks of wild geese (*Anser segetum*) arrive.
29. Virginian-creeper stripped.
30. * Woodcock (*Scolopax rusticola*) arrives.
31. Elm leaves begin to fall.

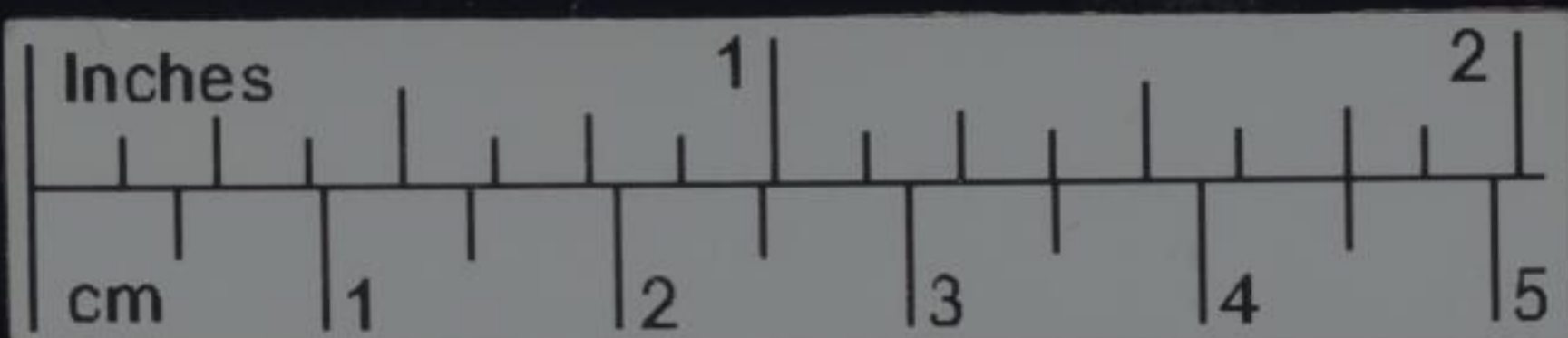


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NOVEMBER, XXX DAYS.

[1847.]

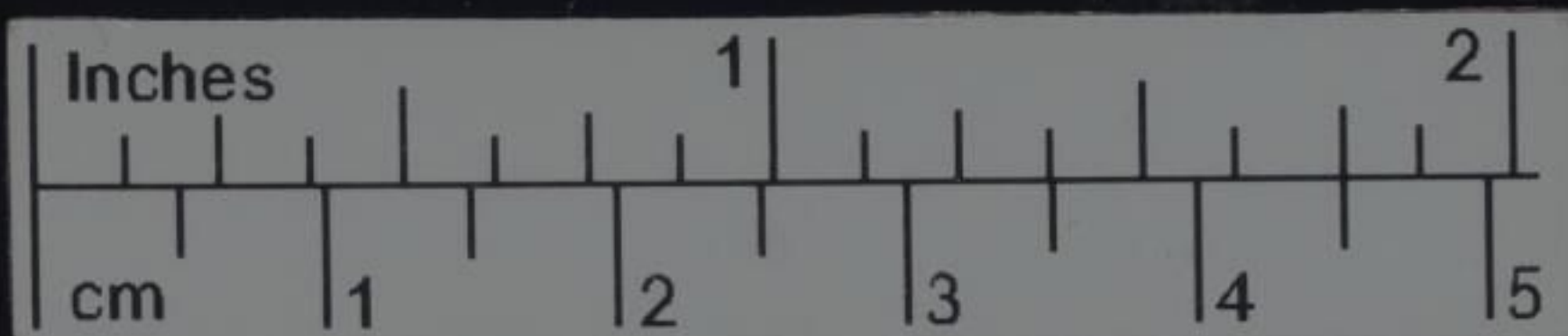
Month days.	Week days.	PHASES OF THE MOON.			Sun rises.	Sun sets.
		New moon, 8th, 3 h. 11 m. morn.				
		First Quarter, 15th, 6 15 aftern.				
		Full moon, 22nd, 10 4 morn.				
Last Quarter, 29th, 4 22 aftern.						
Clock slow.						
7th, 16 m. 10 s. 21st, 14 m. 1 s.						
14th, 15 26 28th, 11 58						
			H M	H M		
1	M	All Saints. Ent. Soc. 8. Chem. Soc. 8	6 55	4 32		
2	Tu	Mich. term beg. Linn. Soc. 8. Hort.	6 57	4 30		
3	W	Geol. Soc. $\frac{1}{2}$ past 8. [Soc. 2	6 59	4 28		
4	Th	Zool. Soc. 3	7 1	4 26		
5	F	Rich. Bradley d. 1732. Bot. Soc. 8	7 3	4 25		
6	S	Asiatic Soc. 2	7 4	4 23		
7	C	23rd Sunday after Trinity	7 6	4 21		
8	M	Bewick d. 1828. Geog. Soc. $\frac{1}{2}$ past 8	7 7	4 20		
9	Tu	Lord Mayor's Day. Zool. Soc. $\frac{1}{2}$ past 8	7 9	4 18		
10	W	Eth. Soc. 8. Mic. Soc. 8. Phar. Soc. 9	7 11	4 16		
11	Th	St. Martin	7 13	4 15		
12	F	Leibnitz d. 1716. Cam. Mich. term d.	7 15	4 13		
13	S	Roy. Bot. Soc. $\frac{1}{4}$ before 4	7 16	4 12		
14	C	24th Sunday after Trinity	7 18	4 11		
15	M	Sir W. Herschell b. 1738. Chem. Soc. 8	7 20	4 9		
16	Tu	Linn. Soc. 8	7 22	4 8		
17	W	Geol. Soc. $\frac{1}{2}$ past 8	7 23	4 6		
18	Th	Roy. Soc. $\frac{1}{2}$ past 8	7 25	4 5		
19	F	Hogg d. 1836	7 27	4 4		
20	S	Asiatic Soc. 2	7 28	4 3		
21	C	25th Sunday after Trinity	7 30	4 2		
22	M	Geog. Soc. $\frac{1}{2}$ past 8	7 32	4 1		
23	Tu	Zool. Soc. $\frac{1}{2}$ past 8	7 33	4 0		
24	W		7 35	3 59		
25	Th	Mich. term ends. Roy. Soc. $\frac{1}{2}$ past 8	7 36	3 58		
26	F	Dr. Watts d. 1740	7 38	3 57		
27	S	Roy. Bot. Soc. $\frac{1}{4}$ before 4	7 40	3 56		
28	C	1st Sun. in Advent. Goldsmith b. 1731	7 41	3 55		
29	M	Ray b. 1628. Bot. Soc. Ann. 8	7 42	3 54		
30	Tu	St. Andrew. Roy. Soc. Ann. 4	7 44	3 53		



DAYS. [1847.

morn. aftern. morn. aftern.	SUN RISES. S	SUN SETS. S
1 s. 58		
	H M	H M
Soc. 8	6 55	4 32
Hort.	6 57	4 30
Soc. 2	6 59	4 28
	7 1	4 26
c. 8	7 3	4 25
	7 4	4 23
	7 6	4 21
ast 8	7 7	4 20
past 8	7 9	4 18
Soc. 9	7 11	4 16
	7 13	4 15
erm d.	7 15	4 13
	7 16	4 12
	7 18	4 11
Soc. 8	7 20	4 9
	7 22	4 8
	7 23	4 6
	7 25	4 5
	7 27	4 4
	7 28	4 3
	7 30	4 2
	7 32	4 1
	7 33	4 0
	7 35	3 59
ast 8	7 36	3 58
	7 38	3 57
	7 40	3 56
.1731	7 41	3 55
	7 42	3 54
	7 44	3 53

10th 2nd. Horke goes

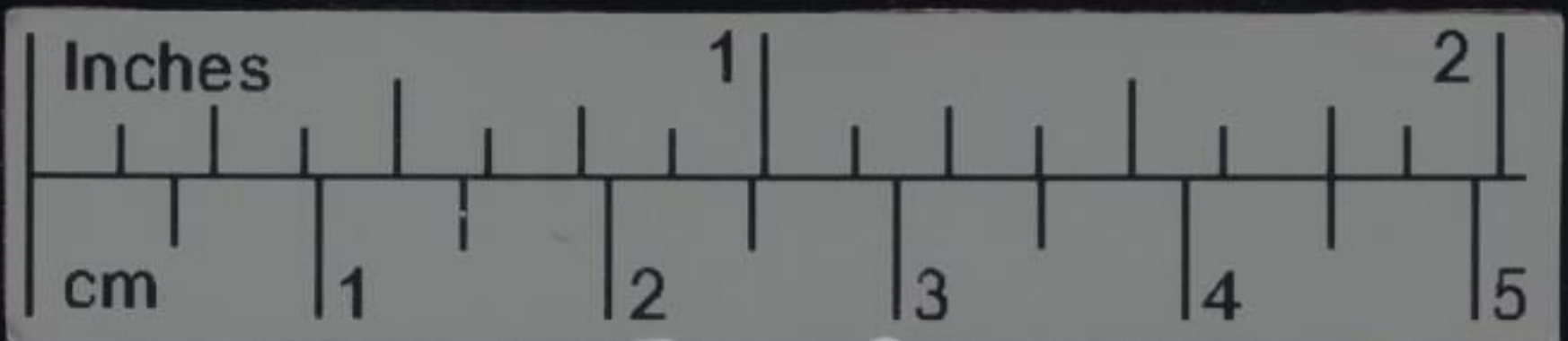


1847.] NOVEMBER, XXX DAYS. 23

season of foliation to that of defoliation. The chief fruiting season is during the months of August and September, though in some plants the fruit may be matured in July, or even earlier. The exact epoch of maturation is marked by the dehiscence of the pericarp, at least in dehiscent fruits, which are the great majority: in indehiscent fruits, it must be determined by their being manifestly ripe.

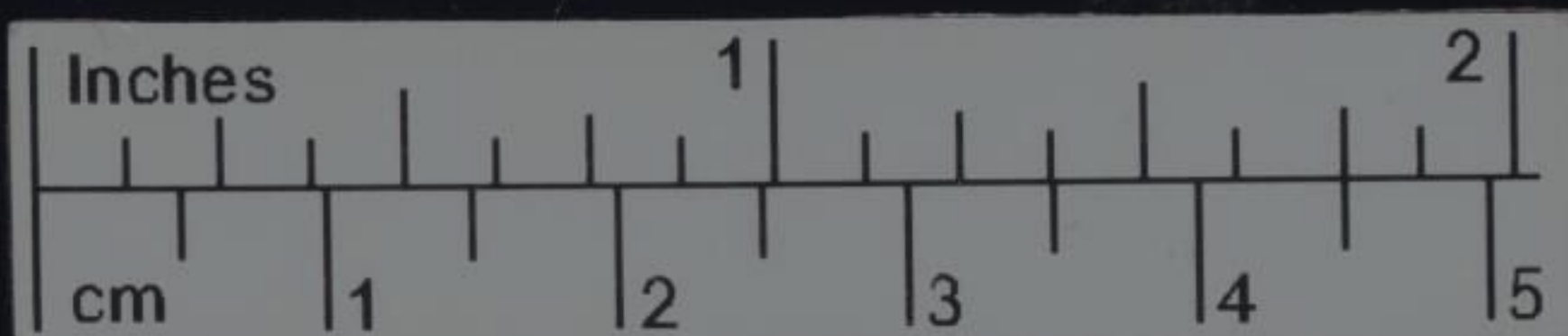
The defoliation of trees commences about the beginning of September, and occupies a period of three months. The fall of the leaf is preceded by a change of colour, which attains its richest tints, as regards trees in general, in October, while the chief fall takes place in November, and is almost always completed by the end of that month, often terminating quite suddenly from the occurrence of sharp frosts, which bring to the ground, in a single night, all the leaves that may yet remain hanging. The naturalist who carries his observations into detail will do well to mark the first commencement of the change of colour, at least in those species in which it is particularly conspicuous (as the dogwood, guelder-rose, Virginia-creeper, and maple), as well as

1. * Sycamore stripped of leaves.
2. Missel thrush (*Turdus viscivorus*), song re-assumed.
* Horse chesnut stripped.
3. * Lilac stripped.
4. * Ash stripped.
* Laburnum stripped.
* White-thorn stripped.
5. * Cherry tree stripped.
7. * Hooded crow (*Corvus cornix*) arrives.
8. Larch turns yellow.
13. Wood-pigeons collect in flocks.
15. * Apricot stripped.
* Beech stripped.
16. Titmice draw near houses.
21. * Fieldfare (*Turdus pilaris*) arrives.
Redwing (*T. iliacus*) arrives.
24. Grey wagtail (*Motacilla boarula*) arrives.
26. * Oak stripped.
28. * Elm stripped.
29. Song thrush (*Turdus musicus*), song re-assumed.



24 DECEMBER, XXXI DAYS. [1847.]

Month days.	Week days.	PHASES OF THE MOON.		Sun rises.	Sun sets.
		New moon, 7th, 8 h. 31 m. aftern.	First Quarter, 15th, 3 26 morn.		
		Full moon, 21st, 10 8 aftern.	Last Quarter, 29th, 1 48 aftern.		
		<i>Clock slow.</i> <i>Clock fast.</i>			
		7th, 8 m. 28 s.	28th, 1 m. 40 s.		
		14th, 5 15			
		21st, 1 49			
				H M	H M
1	W	Geol. Soc. $\frac{1}{2}$ past 8		7 46	3 53
2	Th	Sir J. E. Smith b. 1759. Zool. Soc. 3		7 47	3 52
3	F	Belzoni, traveller, d. 1823. Bot. Soc. 8		7 48	3 52
4	S	Asiatic Soc. 2 [d. 1624		7 50	3 51
5	C	2nd Sund. in Advent. Caspar Bauhin		7 51	3 51
6	M	Ent. Soc. 8. Chem. Soc. 8		7 52	3 50
7	Tu	Linn. Soc. 8. Hort. Soc. 2		7 53	3 50
8	W	Eth. Soc. 8. Mic. Soc. 8. Phar. Soc. 9		7 54	3 50
9	Th	Grouse sh. ends. Roy. Soc. $\frac{1}{2}$ past 8		7 56	3 49
10	F	Dr. Barclay b. 1758		7 57	3 49
11	S	Gay d. 1732. Roy. Bot. Soc. $\frac{1}{4}$ before 4		7 58	3 49
12	C	3rd Sun. in Adv. Dr. Darwin b. 1732		7 59	3 49
13	M	C. Gesner d. 1565. Geog. Soc. $\frac{1}{2}$ past 8		8 0	3 49
14	Tu	I. Walton d. 1638. Zool. Soc. $\frac{1}{2}$ past 8		8 1	3 49
15	W	Geol. Soc. $\frac{1}{2}$ past 8		8 1	3 49
16	Th	Cam. Mic. term ends. Roy. Soc. $\frac{1}{2}$ past 8		8 2	3 50
17	F	Oxf. term ends. Sir H. Davy b. 1778		8 3	3 50
18	S	Philip Miller d. 1771		8 4	3 50
19	C	4th Sunday in Advent		8 5	3 50
20	M	Chem. Soc. 8 [Soc. 8		8 5	3 51
21	Tu	St. Thomas. Shortest day. Linn.		8 6	3 51
22	W	Winter Qr. begins. Huber d. 1831		8 6	3 51
23	Th	Mark Catesby, naturalist, d. 1749		8 7	3 52
24	F	Christmas Eve		8 7	3 52
25	S	Christmas Day [poet, b. 1716		8 7	3 53
26	C	1st Sunday after Christmas. Gray,		8 8	3 54
27	M	St. John. Geog. Soc. $\frac{1}{2}$ past 8		8 8	3 55
28	Tu	Innocents Day. Zool. Soc. $\frac{1}{2}$ past 8		8 8	3 56
29	W	Flamsted d. 1719		8 8	3 57
30	Th	Boyle d. 1691. Roy. Soc. Inst. 1660		8 8	3 58
31	F	Boerhaave b. 1668. Daubenton d. 1799		8 8	3 59



1847.] DECEMBER, XXXI DAYS. 25

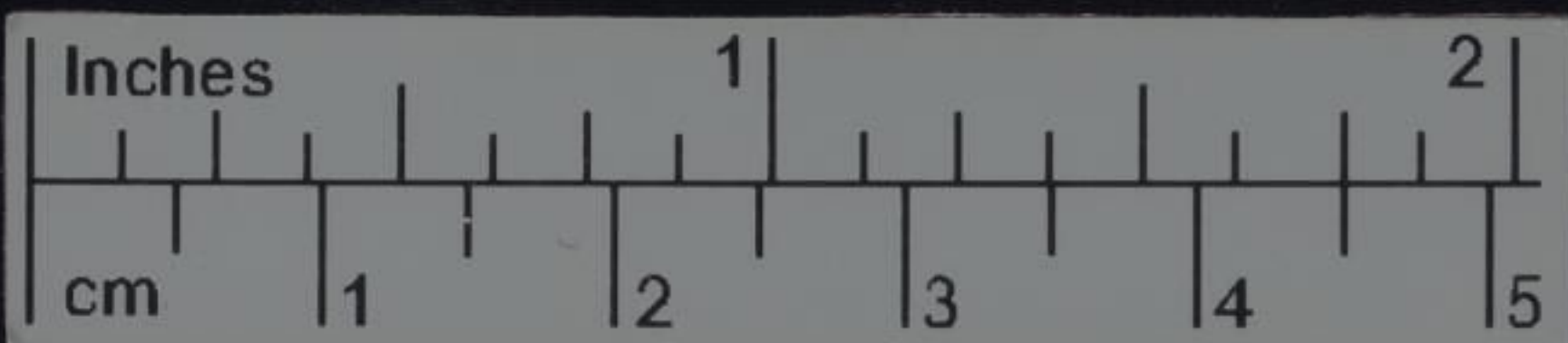
the period of the first leaves falling, and the period when the tree is stripped. This last may be considered as taking place when the greater part of the leaves of the year are down.

In the animal kingdom, the most important phenomena at this season are the departure of the summer birds of passage, and the arrival of the winter residents in their place. The exact period at which the former leave us is not easily ascertained in the case of the majority of the smaller species, but it should be strictly attended to in that of the swallow tribe, in which it may be readily observed. The winter migrants begin to arrive at the end of September or beginning of October, the great bulk generally appearing either during this last month or November, though, if the weather be mild and open, they may not shew themselves some years till December.

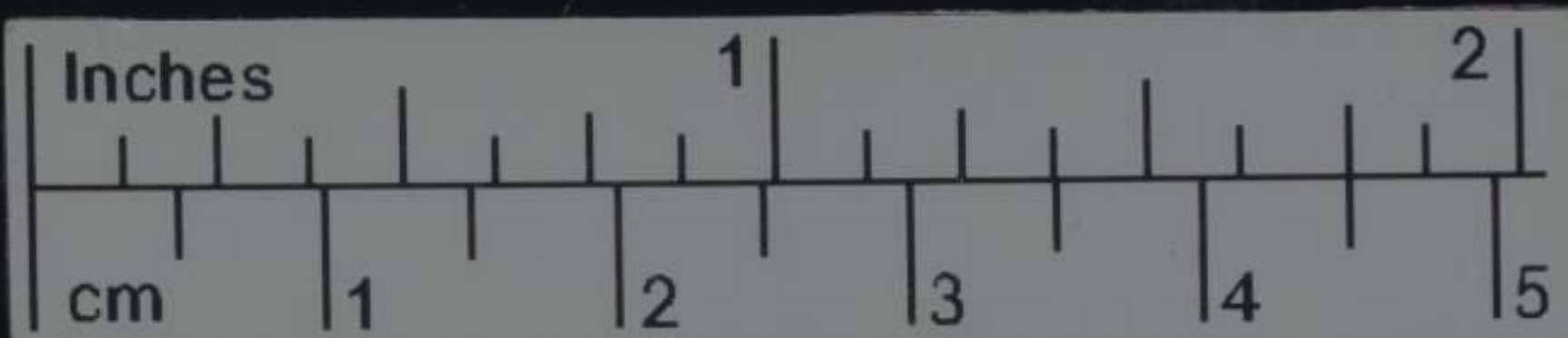
A few birds which usually cease to be heard about Midsummer, occasionally re-assume their song in autumn. Amongst such species are the robin, the great and marsh tits, the hedge accentor, the missel and song thrushes, the chaffinch, the gold-crest, the yellow-hammer, and the skylark. But this return to their spring notes appears to be a matter of great uncertainty, and much dependent upon weather and the character of the season. It has also been suggested, that it may be principally the young cocks of the year which are heard at this period, induced by a fine autumn, thus prematurely as it were, to exercise their vocal powers, their notes at such times being often few and desultory, as in young birds.

Some of these autumnal songsters may be heard throughout the winter, if mild, quite to the commencement of the ensuing spring, when, under any circumstances, they would have resumed their song. And in like manner, many plants, the date of whose flowering usually occurs in the months of January or February, occasionally open their

1. Trees everywhere stripped of leaves.
2. * Pipistrelle bat last seen abroad.
8. Skylarks collect in flocks.
15. Greenfinches collect in flocks.
25. Chaffinches collect in flocks.

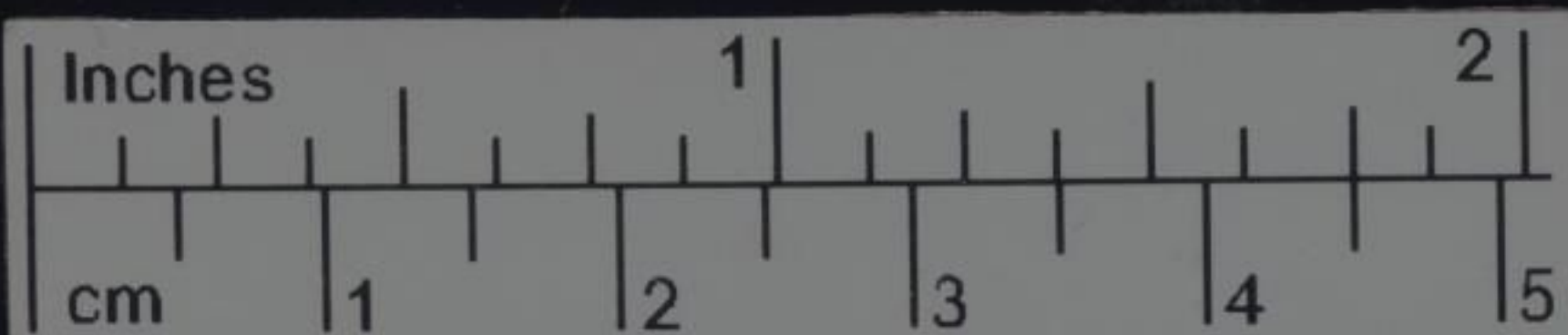


flowers in December of the preceding year. Such are the furze, hepatica, snowdrop, primrose, mezerion, winter aconite, hellebore, and perhaps a few others. It is principally these phenomena, and the flocking of the smaller birds, especially those of the hard-billed or seed-eating kinds, which remain for the attention of the observer during the concluding month of the year. He should, however, then, as at all other times, be on the constant look out, in order to note down any unusual or accidental occurrences, such as may associate themselves with no particular season. Seasons in any way remarkable, whether for their extreme heat or cold, whether for drought or for wet, generally bring with them some phenomena of this kind. Rare birds, stragglers from other countries,—or species hitherto unknown in our own islands,—are sometimes met with under such circumstances, and should be especially watched by the naturalist. Or there may be an unusual abundance of certain familiar species of animals, especially among the insect tribes, which last, if of a kind injurious to the field or garden, it is of importance to record. Or, lastly, there may be some widely-prevailing epidemic or blight, either in the animal or vegetable world, closely connected with meteorological phenomena, and which, though wrapped in much obscurity, as regards the cause of its appearance, can hardly fail to receive some elucidation from the careful observations of those persons who mark down all the attending circumstances, especially if they combine their observations, as it is very desirable they should do, with other observations upon the weather, and the general character of the seasons as they follow in succession.



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VERTEBRATE ANIMALS. 27

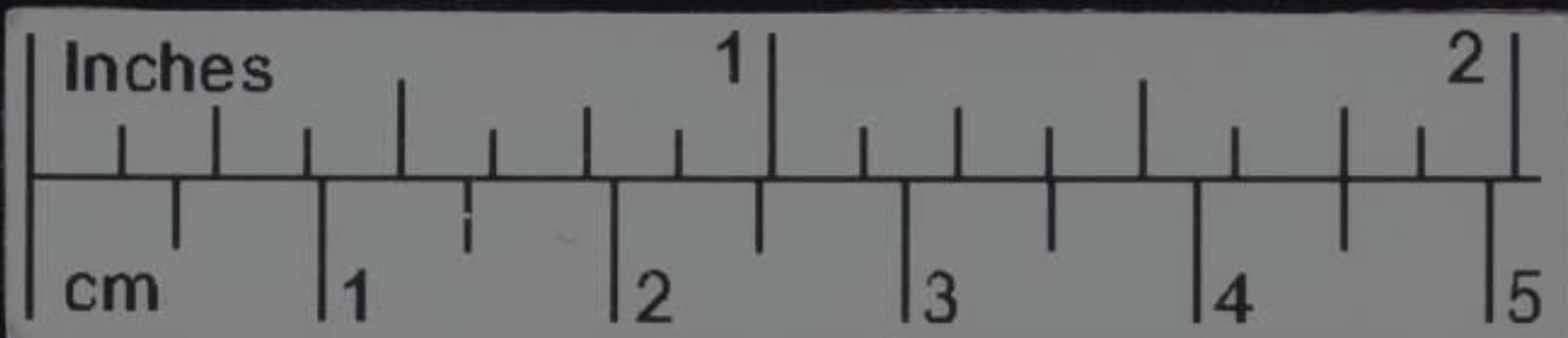
SUMMARY OF BRITISH SPECIES OF VERTEBRATE ANIMALS.

<i>Mammals</i> , 81.	<i>Reptiles</i> , 16,	TOTAL, 696.
<i>Birds</i> , 342.	<i>Fish</i> , 257.	

Amongst the more recent additions may be mentioned, in the class *Mammalia*, two species of Cetaceans. One of these is the *Grampus Cuvieri* of Gray, taken on the coast of the Isle of Wight, in 1845. The other is the *Lagenorhynchus albirostris* of Gray, a new species, captured off Yarmouth, in October of the same year, and described and figured by Mr. Brightwell in the *Ann. and Mag. Nat. Hist.*, vol. xvii. p. 21, tab. 2, as the *Delphinus tursio* of Fabricius.

In the class of birds, a remarkable addition to the British Fauna has been made in the belted kingfisher (*Alcedo alcyon*, Linn.), two specimens of which were killed in Ireland in 1845,—one on the 28th of October, at Annesbrook, county of Meath; the other, a short time afterwards, in the county of Wicklow. The native country of this species is N. America, where it is migratory. There has also occurred in Ireland the purple water-hen (*Porphyrio hyacinthus*, Temm.), a specimen of which is recorded by Mr. Thompson to have been found dead in a ditch near the village of Brandon, in the county of Kerry. In England, and more recently than either of the above captures, the spine-tailed swallow of Australia (*Acanthylis caudacuta*) has been taken in Essex.—See 'The Zoologist,' p. 1492.

In the class of fish, the four following species are among the most recent additions to the Fauna of our seas: 1. The long-finned tunny (*Thynnus alalonga*, Cuv. & Val.), taken in Cornwall. 2. The bogue (*Box vulgaris*, Cuv. & Val.), taken off Falmouth. 3. The gray shark (*Hexanchus griseus*, Mull. & Henl.), taken off Ventnor, in the Isle of Wight, as well as in Cornwall. 4. *Scymnus lichia* (Mull. & Henl.), taken at Brixham. To these may be added, as rare and interesting captures, though not new species in our seas, the plain red mullet (*Mullus barbatus*, Cuv. & Val.), which has occurred at Falmouth, and the lancelet (*Amphioxus lanceolatus*, Yarr.), which has been taken in the Firth of Clyde.

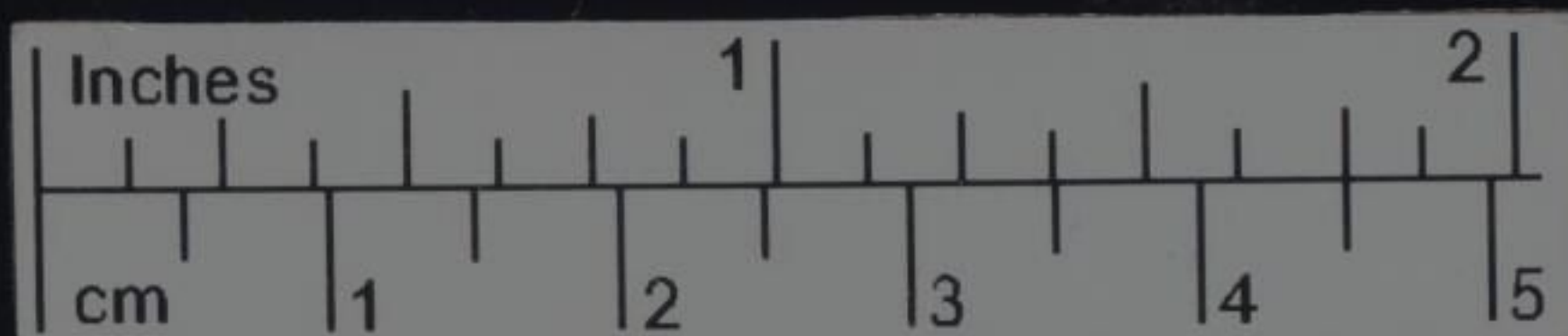


28 PHANEROGAMOUS PLANTS.

SUMMARY OF BRITISH SPECIES OF PHANEROGAMOUS OR VASCULAR PLANTS.

Dicotyledones.

ORD.	SP.	ORD.	SP.
1. Ranunculaceæ ..	41	36. Grossulaceæ	4
2. Berberideæ	2	37. Saxifrageæ	22
3. Nymphæaceæ	3	38. Umbelliferæ	70
4. Papaveraceæ	10	39. Araliaceæ	2
5. Fumariaceæ	8	40. Corneæ	2
6. Cruciferæ	76	41. Loranthaceæ	1
7. Resedaceæ	3	42. Caprifoliaceæ	8
8. Cistineæ	6	43. Rubiaceæ	20
9. Violaceæ	8	44. Valerianeæ	10
10. Droseraceæ	4	45. Dipsaceæ	6
11. Polygaleæ	2	46. Compositæ	142
12. Tamariscineæ	1	47. Campanulaceæ ..	15
13. Frankeniaceæ	2	48. Ericaceæ	24
14. Elatineæ	2	49. Illicineæ	1
15. Caryophylleæ	67	50. Jasminaceæ	2
16. Malvaceæ	7	51. Apocyneæ	2
17. Tiliaceæ	3	52. Gentianeæ	13
18. Hypericineæ	13	53. Polemoniaceæ	1
19. Acerineæ	2	54. Convolvulaceæ ..	7
20. Geraniaceæ	16	55. Boragineæ	26
21. Lineæ	5	56. Solaneæ	12
22. Balsamineæ	2	57. Orobancheæ	11
23. Oxalideæ	3	58. Scrophularineæ ..	49
24. Celastrineæ	2	59. Labiataæ	56
25. Rhamneæ	2	60. Verbenaceæ	1
26. Leguminosæ	76	61. Lentibulareæ	7
27. Rosaceæ	101	62. Primulaceæ	18
28. Lythrarieæ	3	63. Plumbagineæ	6
29. Ceratophylleæ	2	64. Plantagineæ	6
30. Onagrariæ	14	65. Amaranthaceæ ..	1
31. Halorageæ	8	66. Chenopodiaceæ ..	29
32. Cucurbitaceæ	1	67. Polygoneæ	29
33. Portulaceæ	1	68. Elæagneæ	1
34. Paronychieæ	8	69. Thymeleæ	2
35. Crassulaceæ	16	70. Santalaceæ	2



PHANEROGAMOUS PLANTS. 29

ORD.		SP.	ORD.		SP.
71.	Aristolochiææ	2	74.	Urticææ	14
72.	Empetreaæ	1	75.	Amentaceæ	73
73.	Euphorbiaceæ	18	76.	Coniferæ	4

Monocotyledones.

77.	Hydrocharideæ	2	85.	Restiaceæ	1
78.	Orchideæ	38	86.	Juncaceæ	31
79.	Irideæ	8	87.	Alismaceæ	9
80.	Amaryllideæ	5	88.	Aroideæ	12
81.	Tameæ	1	89.	Potameæ	25
82.	Asparageæ	8	90.	Cyperaceæ	101
83.	Liliaceæ	22	91.	Gramineæ	126
84.	Colchicaceæ	2			

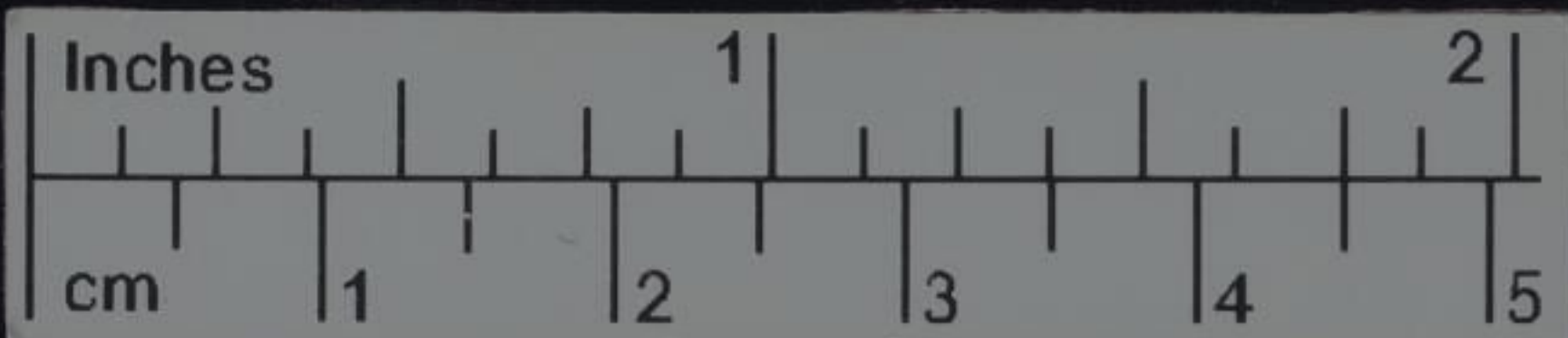
TOT. DICOTYLED. 1240

TOT. MONOCOTYLED. 391

GR. TOT. 1631

Some of the more recent and interesting additions to the British Flora consist of the following species: 1. *Helianthemum breweri* (Plan.), found at Holyhead. 2. *Alsine stricta* (Wahl.), from Teesdale. 3. *Agrimonia odorata* (Ait.), Jersey. 4. *Sedum purpureum* (Tausch.), Hertfordshire and Westmoreland. 5. *Valeriana sambucifolia* (Mikan.), common. 6. *Achillea tanacetifolia* (All.), near Sheffield. 7. *Cuscuta trifolii* (Bab.), common. 8. *Orobanche amethytea* (Thuill.), Whitesand Bay, Cornwall. 9. *O. arenaria* (Bork.), Jersey. 10. *Linaria supina* (Desf.), Plymouth. 11. *Calamintha sylvatica* (Bromf.), Isle of Wight. 12. *Lysimachia ciliata* (L.), Cumberland. 13. *Carex persoonii* (Sieber), Highlands of Scotland. 14. *C. grahami* (Boott), Clova Mountains. 15. *C. montana* (L.), Tonbridge Wells. 16. *Leersia oryzoides* (Sw.), marshes in Sussex. 17. *Glyceria plicata* (Fries), common.

Some of the older species are also now found to embrace two or more distinct forms.



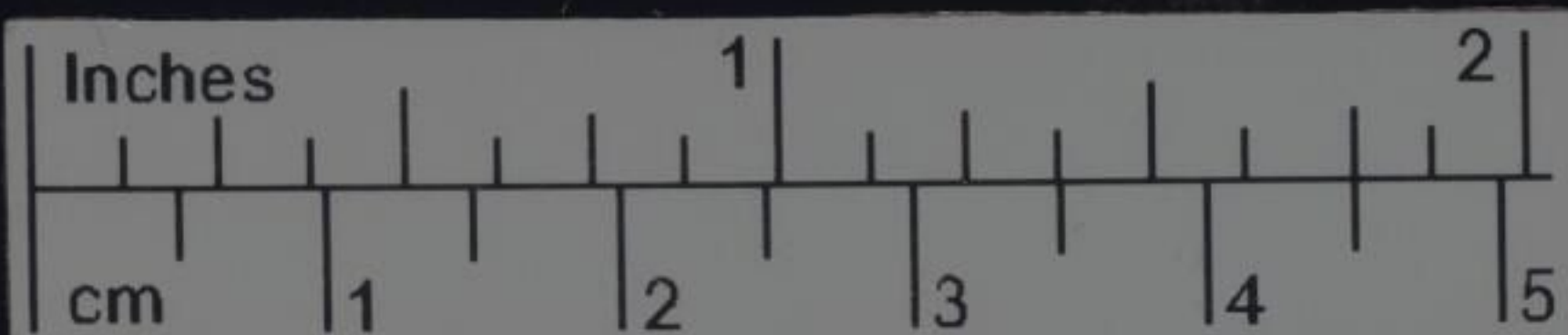
NATURAL HISTORY SOCIETIES AND INSTITUTIONS IN THE METROPOLIS.

ROYAL SOCIETY, SOMERSET HOUSE.—The election of Fellows is conducted by ballot: less than two-thirds ayes of those present (twenty-one, at least) exclude. Admission fee, £10. Annual subscription, £4. Composition fee, £60; or, should the candidate have presented a paper published in the 'Philosophical Transactions' of the society, the composition fee is reduced to £40. The library is open to the Fellows every day, except Sunday, Good Friday, and in Easter, Whitsun, and Christmas weeks. The meetings are held every Thursday, from the third Thursday in November to the third in June, except on established holidays, and the week in which the anniversary occurs. This is held on St. Andrew's day.

LINNEAN SOCIETY, SOHO-SQUARE.—The library is open every day, except Saturday, and the museum on Wednesdays and Fridays, from 12 to 4. Strangers may be admitted by personal introduction of Fellows. The meetings of the society are held at 8, on the first and third Tuesday in every month, from November to June, except in January, when there is no meeting on the first Tuesday, and in May, when the second meeting is always on the 24th, being the anniversary of the birth of Linneus. Annual subscription, £3. Entrance fee, £6. Composition fee, £36.

ZOOLOGICAL SOCIETY, 11, HANOVER-SQUARE.—The gardens in the Regent's Park, containing an extensive collection of living animals, are open to Fellows at all times, each having the privilege of introducing two friends, and to strangers, by orders signed by Fellows, on payment of one shilling each person. The meetings of the society are held in Hanover-square, on the second and fourth Tuesday in every month; the chair is taken at half-past 8. *Secretary*, W. Ogilby, Esq. Annual subscription, £3. Admission fee, £5.

ENTOMOLOGICAL SOCIETY, 17, OLD BOND-STREET.—The meetings of the society are held on the first Monday in every month, at the society's apartments, at 8. The curator is in attendance to show the collections, every



SOCIETIES.

31

Tuesday, between the hours of 1 and 7 P.M. *President*, The Rev. F. W. Hope. *Secretary*, J. O. Westwood, Esq. Annual subscription, one guinea. Entrance fee, two guineas.

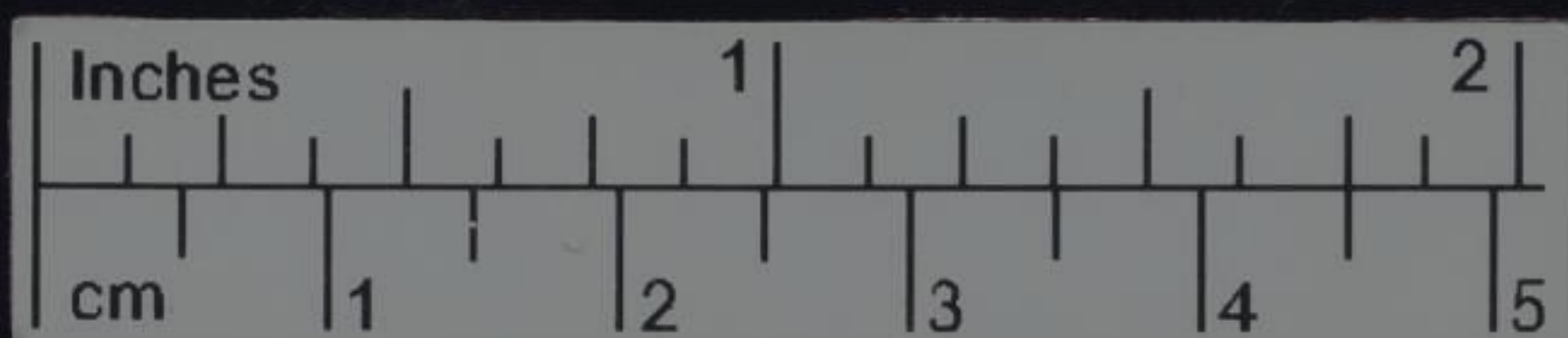
MICROSCOPICAL SOCIETY, 21, REGENT-STREET.—The meetings are held on one Wednesday in every month, excepting the months of July, August and September: business commences at 8 o'clock. The anniversary is on Wednesday, February 10th, at 7 o'clock. Annual subscription, one guinea. Entrance fee, one guinea. The members are entitled to the Transactions published by the society: also to the use of the society's microscopes, which are open every Wednesday, from 10 to 4, at the society's rooms.

ETHNOLOGICAL SOCIETY, 27 A, SACKVILLE-STREET.—*President*, Dr. Prichard. *Secretary*, Dr. King. Founded to inquire into the distinguishing characteristics, moral and physical, of the varieties of mankind. Entrance fee, £3, except for first 200 members. Annual fee, £2. Composition, £20; first 200, £12.

HORTICULTURAL SOCIETY, 21, REGENT-STREET.—The gardens are at Chiswick, and open from 9 till 6 every day, except Sunday, to Fellows, and visitors introduced by Fellows, either personally or by order. Three exhibitions are held annually at the garden. *Secretaries*, J. R. Gowen, Esq., and Professor Lindley. Annual subscription, four guineas. Entrance fee, six guineas.

BOTANICAL SOCIETY, 20, BEDFORD-STREET, COVENT-GARDEN.—Meetings held on the first Friday of every month, at 8 P.M. The anniversary is on Monday, Nov. 29th. The herbarium may be inspected every Friday, from 7 to 10 P.M. The library is open on the same evenings. Entrance fee, £1. 1s. Annual subscription, for resident members, £1. 1s.; for country members, 10s. 6d. Ladies are eligible as members. *President*, J. E. Gray, Esq., F.R.S., &c. *Secretary*, G. E. Dennes, Esq.

ROYAL BOTANIC SOCIETY OF LONDON.—Gardens in the inner circle, Regent's-park. Exhibitions, with prizes for flowers and fruit, on May 12th, June 9th and July 7th. Promenade meetings every Wednesday in May, June and July. *President*, The Duke of Norfolk. *Secretary*, J. De C. Sowerby. Office in the gardens.



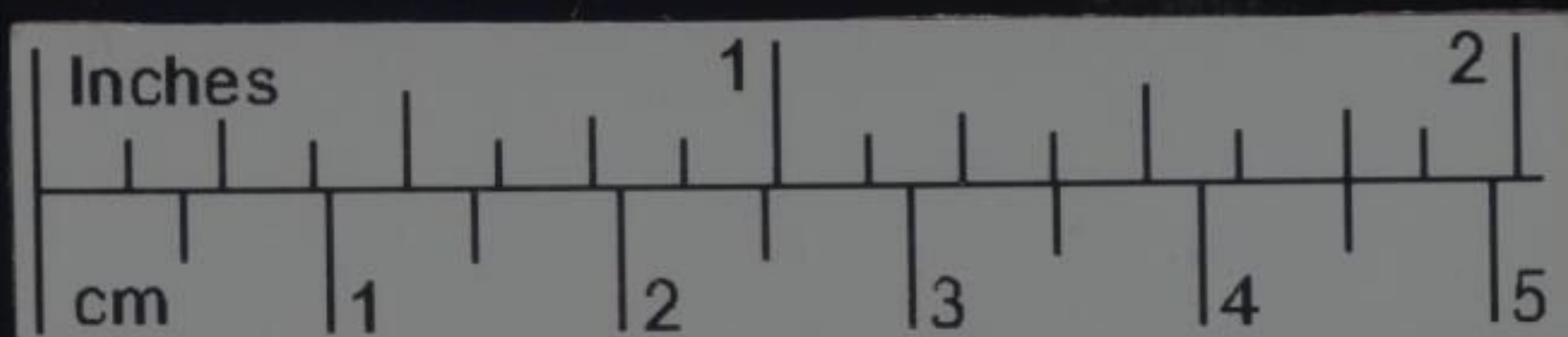
GEOLOGICAL SOCIETY, SOMERSET HOUSE.—The meetings are held on alternate Wednesdays, at half-past 8 P.M., from the first Wednesday in December to the first in June, excepting at Christmas and Easter. The anniversary is held on the 19th of February. The library and museums are open every day from 11 till 5. *President*, Leonard Horner, Esq. *Secretaries*, W. J. Hamilton and J. C. Moore, Esqrs. *Vice-Secretary*, Professor Ansted. *Librarian and Curator* of the Museum, Mr. J. De C. Sowerby. Admission fee, for resident fellows, 6 guineas; annual subscription, 3 guineas. Composition, 30 guineas. For non-resident fellows, admission fee, 10 guineas, no annual subscription.

BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.—Sixteenth meeting at Oxford, on the 24th June, 1847. *President elect*, Sir R. H. Inglis, Bart., M.P. Entrance fee, for members, £1. Annual, £1. Composition (including book subscription), £10. Associates for the meeting, £1.

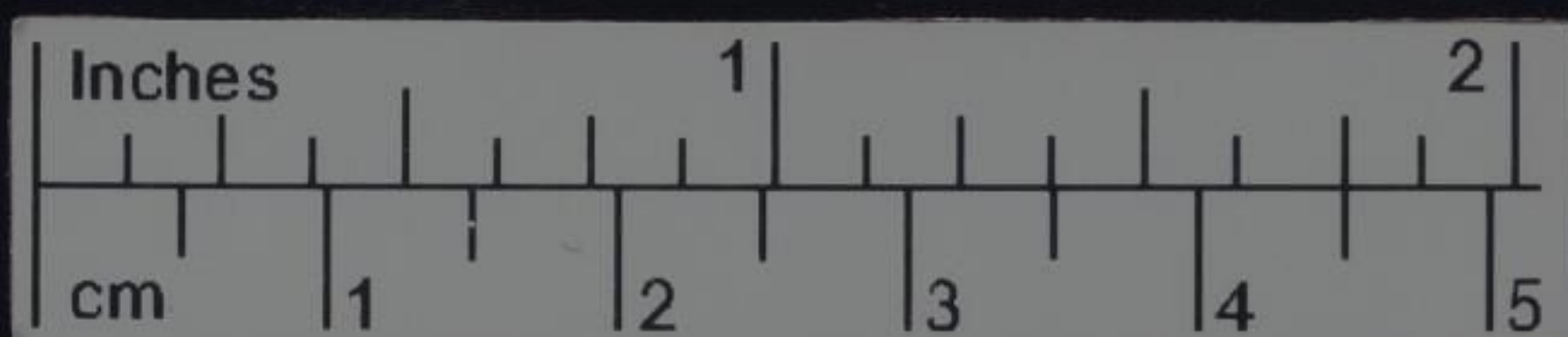
ROYAL INSTITUTION OF GREAT BRITAIN, ALBEMARLE-STREET.—The lectures, which are free to all the members, are delivered from January to the early part of June. There is a public and an academical lecture theatre, a laboratory, a copious library (open from 9 A.M. till 11 P.M.), and a splendid museum, geological and mineralogical. The meetings are held every Friday, at half-past 8 P.M., from the 15th of January to the 4th of June. Admission fee, £6. 6s. Annual subscription, £5. 5s.

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