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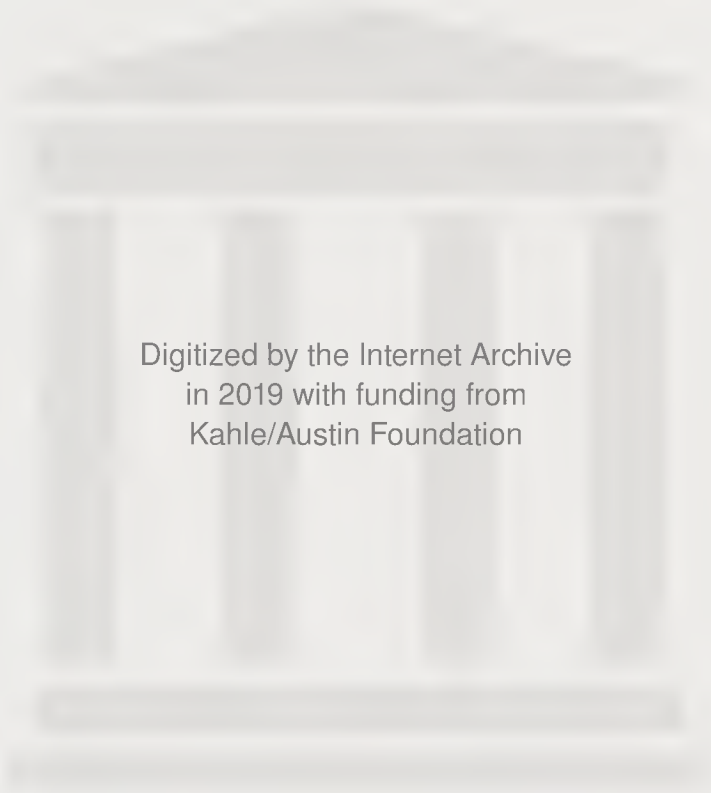
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1933

141st Year

N. S. E.



SPRING.



SUMMER.

THE
OLD
FARMER'S
1933
ALMANAC
BY
ROBERT B. THOMAS



AUTUMN.



WINTER.

Nichols Sc

PUBLISHED BY
THE OLD FARMER'S ALMANAC
BOSTON, MASS.

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Your TASTE

Priced To Suit

Your POCKET

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Number One Hundred and Forty-One.

THE
(OLD)
FARMER'S ALMANACK,

CALCULATED ON A NEW AND IMPROVED PLAN
FOR THE YEAR OF OUR LORD

1933

Being 1st after BISSEXTILE or LEAP-YEAR, and (until July 4)
157th of American Independence.

FITTED FOR BOSTON, BUT WILL ANSWER FOR ALL THE NEW ENGLAND STATES.

Containing, besides the large number of Astronomical Calculations
and the Farmer's Calendar for every month
in the year, a variety of

NEW, USEFUL, AND ENTERTAINING MATTER.

ESTABLISHED IN 1793

BY ROBERT B. THOMAS.



“While the bright radiant sun in centre glows,
The earth, in annual motion round it goes;
At the same time on its own axis reels,
And gives us change of seasons as it wheels.”

*From the Title Page, Old Farmer's Almanac
First Issue, 1793.*

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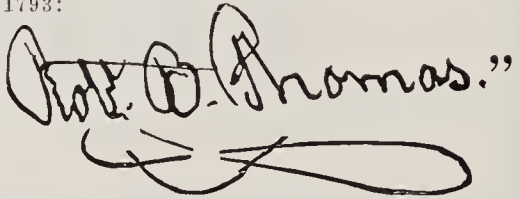
TO PATRONS AND CORRESPONDENTS.

To our friends throughout New England we present the 141st edition of what has been said to be the most historical and revered and withal the most authentic American publication--THE OLD FARMER'S ALMANAC.

This is the largest edition of the Almanac ever published--96 pages. Many valuable features have been added including the new Federal Income Tax Laws and the Agricultural Experiment Stations of New England.

For 1933 we wish for every one of our hundreds of thousands of subscribers and their families all health, happiness and prosperity in this little old world of ours, remembering the words of our founder in 1793:

"It is by our works and not by our words we would be judged: these we hope will sustain us in the humble though proud station we have so long held. . . ."



(Continued on page 33)

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JANUARY.							FEBRUARY.							MARCH.							APRIL.							
\$	M	T	W	Th	F	S	\$	M	T	W	Th	F	S	\$	M	T	W	Th	F	S	\$	M	T	W	Th	F	S	
1	2	3	4	5	6	7	-	-	-	1	2	3	4	-	-	-	1	2	3	4	-	-	-	-	-	-	1	
8	9	10	11	12	13	14	5	6	7	8	9	10	11	5	6	7	8	9	10	11	2	3	4	5	6	7	8	
15	16	17	18	19	20	21	12	13	14	15	16	17	18	12	13	14	15	16	17	18	9	10	11	12	13	14	15	
22	23	24	25	26	27	28	19	20	21	22	23	24	25	19	20	21	22	23	24	25	16	17	18	19	20	21	22	
29	30	31	-	-	-	-	26	27	28	-	-	-	-	26	27	28	29	30	31	-	23	24	25	26	27	28	29	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30	-	-	-	-	-	-	
MAY.							JUNE.							JULY.							AUGUST.							
-	1	2	3	4	5	6	-	-	-	-	1	2	3	-	-	-	-	-	-	1	-	-	1	2	3	4	5	
7	8	9	10	11	12	13	4	5	6	7	8	9	10	2	3	4	5	6	7	8	6	7	8	9	10	11	12	
14	15	16	17	18	19	20	11	12	13	14	15	16	17	9	10	11	12	13	14	15	13	14	15	16	17	18	19	
21	22	23	24	25	26	27	18	19	20	21	22	23	24	16	17	18	19	20	21	22	20	21	22	23	24	25	26	
28	29	30	31	-	-	-	25	26	27	28	29	30	-	23	24	25	26	27	28	29	27	28	29	30	31	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	30	31	-	-	-	-	-	-	-	-	-	-	-	-	
SEPTEMBER.							OCTOBER.							NOVEMBER.							DECEMBER.							
-	-	-	-	-	1	2	1	2	3	4	5	6	7	-	-	-	1	2	3	4	-	-	-	-	-	-	1	2
3	4	5	6	7	8	9	8	9	10	11	12	13	14	5	6	7	8	9	10	11	3	4	5	6	7	8	9	
10	11	12	13	14	15	16	15	16	17	18	19	20	21	12	13	14	15	16	17	18	10	11	12	13	14	15	16	
17	18	19	20	21	22	23	22	23	24	25	26	27	28	19	20	21	22	23	24	25	17	18	19	20	21	22	23	
24	25	26	27	28	29	30	29	30	31	-	-	-	-	26	27	28	29	30	-	-	24	25	26	27	28	29	30	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	31	-	-	-	-	-	-	

ECLIPSES FOR THE YEAR 1933.

In the year 1933 there will be two Eclipses: both of the Sun, both annular, and neither visible in New England.

I. An Annular Eclipse of the Sun, February 24, 1933, invisible in New England. The Eclipse begins in the Republic of Argentina, in longitude $62^{\circ} 21'$ west from Greenwich, latitude $34^{\circ} 56'$ south, and ends in Egypt, in longitude $35^{\circ} 51'$ east from Greenwich, latitude $19^{\circ} 0'$ north. At its maximum, the annular phase of the Eclipse lasts 1 minute and 52 seconds.

II. An Annular Eclipse of the Sun, August 21, 1933, invisible in New England. The Eclipse begins in Arabia, in longitude $41^{\circ} 0'$ east from Greenwich, latitude $28^{\circ} 26'$ north, and ends in Australia, in longitude $134^{\circ} 21'$ east from Greenwich, latitude $22^{\circ} 16'$ south. At its maximum, the annular phase of the Eclipse lasts 2 minutes and 18 seconds.

MORNING AND EVENING STARS, 1933.

Mercury will be most favorably seen as an Evening Star about March 6, July 2, and October 28, on which dates it sets 1h 35m, 1h 27m, and 0h 52m, respectively, later than the Sun; and as a Morning Star about April 20, August 17, and December 6, on which dates it rises 0h 49m, 1h 32m, and 1h 49m, respectively, before the Sun.

Venus will be Morning Star until April 21, and then Evening Star the rest of the year.

Mars will be Morning Star until March 1, and then Evening Star the rest of the year.

Jupiter will be Morning Star until March 9, then Evening Star until September 27, and then Morning Star the rest of the year.

Saturn will be Evening Star until January 27, then Morning Star until August 5, and then Evening Star the rest of the year.

THE SEASONS, 1933.

Winter begins	1932, December 21,	8h.15m. P. M.	—	Sun enters	Capricornus,	♑
Spring	" 1933, March 20,	8h.43m. P. M.		" "	Aries,	♈
Summer	" " June 21,	4h.12m. P. M.		" "	Cancer,	♋
Autumn	" " September 23,	7h. 1m. A. M.		" "	Libra,	♎
Winter	" " December 22,	1h.58m. A. M.		" "	Capricornus,	♑
Spring	" 1934 March 21,	2h.28m. A. M.		" "	Aries,	♈
	Length of Winter,	1932-1933, 89 days,	0 hours,	28 minutes.		
	" " Spring, 1933,	92 "	19 "	29 "		
	" " Summer, "	93 "	14 "	49 "		
	" " Autumn, "	89 "	18 "	57 "		
	" " Winter, 1933-1934, 89	"	0 "	30 "		

EARTH IN PERIHELION AND APHELION, 1933.

January 3, 1933, 2h. P.M. Earth in Perihelion; distant from the Sun about 91,346,000 miles. July 2, 1933, 4h. P.M., Earth in Aphelion; distant from the Sun about 94,454,000 miles.

VENUS, MARS, JUPITER AND SATURN, 1933.

Below are given the times of the rising or setting of the Planets named, on the first, eleventh and twenty-first days of each month. The time of the rising or setting of any one of said Planets between the days named may be found with sufficient accuracy by interpolation.

1933	VENUS		MARS		JUPITER		SATURN	
		h. m.		h. m.		h. m.		h. m.
JANUARY	1st	rises 5 12 A.M.	rises 9 50 P.M.	rises 10 20 P.M.	sets 6 13 P.M.			
"	11th	" 5 33 A.M.	" 9 18 P.M.	" 9 40 P.M.	" 5 40 P.M.			
"	21st	" 5 48 A.M.	" 8 41 P.M.	" 8 59 P.M.	" 5 7 P.M.			
FEBRUARY	1st	rises 5 59 A.M.	rises 7 52 P.M.	rises 8 12 P.M.	rises 6 50 A.M.			
"	11th	" 6 4 A.M.	" 7 1 P.M.	" 7 28 P.M.	" 6 14 A.M.			
"	21st	" 6 2 A.M.	" 6 5 P.M.	" 6 43 P.M.	" 5 38 A.M.			
MARCH	1st	rises 5 56 A.M.	rises 5 17 P.M.	rises 6 6 P.M.	rises 5 9 A.M.			
"	11th	" 5 48 A.M.	sets 6 2 A.M.	sets 6 13 A.M.	" 4 37 A.M.			
"	21st	" 5 37 A.M.	" 5 13 A.M.	" 5 31 A.M.	" 3 57 A.M.			
APRIL	1st	rises 5 22 A.M.	sets 4 22 A.M.	sets 4 45 A.M.	rises 3 17 A.M.			
"	11th	" 5 12 A.M.	" 3 39 A.M.	" 4 3 A.M.	" 2 39 A.M.			
"	21st	" 5 1 A.M.	" 2 59 A.M.	" 3 22 A.M.	" 2 2 A.M.			
MAY	1st	sets 6 54 P.M.	sets 2 21 A.M.	sets 2 41 A.M.	rises 1 24 A.M.			
"	11th	" 7 20 P.M.	" 1 46 A.M.	" 2 2 A.M.	" 0 46 A.M.			
"	21st	" 7 44 P.M.	" 1 13 A.M.	" 1 23 A.M.	" 0 7 A.M.			
JUNE	1st	sets 8 8 P.M.	sets 0 38 A.M.	sets 0 41 A.M.	rises 11 20 P.M.			
"	11th	" 8 25 P.M.	" 0 4 A.M.	" 0 3 A.M.	" 10 40 P.M.			
"	21st	" 8 36 P.M.	" 11 34 P.M.	" 11 26 P.M.	" 10 00 P.M.			
JULY	1st	sets 8 40 P.M.	sets 11 5 P.M.	sets 10 46 P.M.	rises 9 20 P.M.			
"	11th	" 8 39 P.M.	" 10 37 P.M.	" 10 10 P.M.	" 8 39 P.M.			
"	21st	" 8 33 P.M.	" 10 10 P.M.	" 9 34 P.M.	" 7 58 P.M.			
AUGUST	1st	sets 8 21 P.M.	sets 9 40 P.M.	sets 8 55 P.M.	rises 7 12 P.M.			
"	11th	" 8 8 P.M.	" 9 16 P.M.	" 8 20 P.M.	sets 4 23 A.M.			
"	21st	" 7 54 P.M.	" 8 49 P.M.	" 7 45 P.M.	" 3 40 A.M.			
SEPTEMBER	1st	sets 7 37 P.M.	sets 8 23 P.M.	sets 7 6 P.M.	sets 2 53 A.M.			
"	11th	" 7 23 P.M.	" 8 00 P.M.	" 6 32 P.M.	" 2 11 A.M.			
"	21st	" 7 10 P.M.	" 7 39 P.M.	" 6 00 P.M.	" 1 29 A.M.			
OCTOBER	1st	sets 7 00 P.M.	sets 7 20 P.M.	rises 5 22 A.M.	sets 0 48 A.M.			
"	11th	" 6 54 P.M.	" 7 2 P.M.	" 4 53 A.M.	" 0 8 A.M.			
"	21st	" 6 52 P.M.	" 6 47 P.M.	" 4 24 A.M.	" 11 25 P.M.			
NOVEMBER	1st	sets 6 55 P.M.	sets 6 33 P.M.	rises 3 52 A.M.	sets 10 43 P.M.			
"	11th	" 7 4 P.M.	" 6 24 P.M.	" 3 23 A.M.	" 10 6 P.M.			
"	21st	" 7 16 P.M.	" 6 17 P.M.	" 2 56 A.M.	" 9 29 P.M.			
DECEMBER	1st	sets 7 28 P.M.	sets 6 11 P.M.	rises 2 26 A.M.	sets 8 54 P.M.			
"	11th	" 7 43 P.M.	" 6 9 P.M.	" 1 55 A.M.	" 8 18 P.M.			
"	21st	" 7 44 P.M.	" 6 9 P.M.	" 1 23 A.M.	" 7 44 P.M.			
"	31st	" 7 40 P.M.	" 6 9 P.M.	" 0 50 A.M.	" 7 10 P.M.			

TIDE CORRECTIONS.

Both the times and heights of the Tides in the calendar are for the Port of Boston. The following table gives the approximate difference between Boston and the places named. If the hours and minutes opposite a place named in the table are preceded by a "+" sign, the time of high water at that place will be that much later than at Boston; if preceded by a "-" sign, high water will be that much earlier. This also applies to the heights of the tide. If the feet in the table opposite the place are preceded by a "+" sign, the height of high water at that place will be that much higher than the height at Boston; if preceded by a "-" sign, the height of high water will be that much lower than the height at Boston.

Port	h. m.	feet	Port	h. m.	feet
Augusta, Me.	+ 3 42	- 5.5	New Bedford, Mass.	- 8 31	- 5.6
Bangor, Me.	- 0 17	+ 8.5	Newburyport, Mass.	+ 0 11	- 1.8
Bar Harbor, Me.	- 0 41	+ 0.9	New Haven, Conn.	- 0 12	- 3.6
Bath, Me.	+ 0 42	- 8.2	New London, Conn.	- 1 58	- 7.1
Belfast, Me.	- 0 26	+ 0.1	Newport, R. I.	- 8 43	- 6.1
Block Island, R. I.	- 8 53	- 6.6	New York, Gov. Island	- 8 12	- 5.2
Boothbay Harbor, Me.	- 0 29	- 0.8	Plymouth, Mass.	- 0 08	+ 0.0
Bridgeport, Conn.	- 0 10	- 2.4	Point Judith, R. I.	- 3 41	- 6.5
Bristol, R. I.	- 3 25	- 5.6	Portland, Me.	- 0 20	- 0.7
Camden, Me.	- 0 27	+ 0.0	Port Clyde, Me.	- 0 85	- 0.3
Chatham Lights, Mass.	+ 0 13	- 2.9	Portsmouth, N. H.	- 0 08	- 0.9
Cohasset, Mass.	- 0 13	- 0.6	Providence, R. I.	- 3 14	- 5.0
Eastport, Me.	- 0 36	+ 8.6	Provincetown, Mass.	- 0 09	- 0.4
Edgartown, Mass.	+ 0 39	- 7.6	Rockland, Me.	- 0 23	+ 0.1
Fall River, Mass.	- 3 17	- 4.7	Salem, Mass.	- 0 12	- 0.6
Gloucester, Mass.	- 0 15	- 0.7	Sandwich, Mass.	+ 0 02	- 0.2
Greenport, L. I.	- 0 59	- 7.2	Stamford, Conn.	- 0 13	- 2.3
Hartford, Conn.	+ 3 54	- 8.8	Stonington, Conn.	- 2 25	- 6.9
Hyannisport, Mass.	+ 0 45	- 6.3	Vineyard Haven, Mass.	+ 0 13	- 7.9
Nantucket, Mass.	+ 0 52	- 6.5	West Falmouth, Mass.	- 8 39	- 5.5
Narragansett Pier, R. I.	- 3 44	- 6.1	Wood's Hole, Fish Com. Whf.	- 8 03	- 7.8

1933]

JANUARY, FIRST MONTH.

ASTRONOMICAL CALCULATIONS.

☉'s Declination.	Days.		d. m.		Days.		d. m.		Days.		d. m.	
	1	23	00	7	22 22	13	21 28	19	20 20	25	18 57	
2	22	55	8	22 14	14	21 18	20	20 07	26	18 42		
3	22	49	9	22 06	15	21 07	21	19 54	27	18 27		
4	22	43	10	21 57	16	20 56	22	19 40	28	18 11		
5	22	37	11	21 48	17	20 44	23	19 26	29	17 55		
6	22	30	12	21 38	18	20 32	24	19 12	30	17 39		

☾ First Quarter, 3d day, 11h. 24m., morning, E.

☉ Full Moon, 11th day, 3h. 36m., evening, E.

☾ Last Quarter, 19th day, 1h. 15m., morning, E.

● New Moon, 25th day, 6h. 20m., evening, W.

Day of Year.	Day of Month.	Day of the Week.	☉		Length of Days.		Day's Iner.		Sun Fast.	Moon's AGE.	Full Sea, Boston.		☽'s Place	☽ Sets.		☽ Souths.	
			Rises. h. m.	Sets. h. m.	h.	m.	h.	m.			Morn	Even		h.	m.	h.	m.
1	1	S.	7 14	4 22	9 8	0 4	12 5	2 3/4	3	Psc	10 29	4 24					
2	2	M.	7 14	4 23	9 9	0 5	12 6	3 1/2	3 3/4	Ari	11 34	5 06					
3	3	Tu.	7 14	4 24	9 10	0 6	11 7	4 1/2	4 3/4	Ari	morn	5 46					
4	4	W.	7 14	4 25	9 11	0 7	11 8	5 1/4	5 3/4	Ari	0 37	6 28					
5	5	Th.	7 14	4 26	9 12	0 8	10 9	6	6 1/2	Tau	1 41	7 11					
6	6	Fr.	7 14	4 27	9 13	0 9	10 10	7	7 1/2	Tau	2 45	7 56					
7	7	Sa.	7 14	4 28	9 14	0 10	9 11	7 3/4	8 1/4	G'm	3 48	8 44					
8	8	S.	7 13	4 29	9 16	0 12	9 12	8 1/2	9 1/4	G'm	4 50	9 35					
9	9	M.	7 13	4 30	9 17	0 13	8 13	9 1/4	9 3/4	G'm	5 49	10 28					
10	10	Tu.	7 13	4 31	9 18	0 14	8 14	10	10 1/2	Cnc	6 40	11 21					
11	11	W.	7 13	4 32	9 19	0 15	8	10 3/4	11 1/4	Cnc	rises	morn					
12	12	Th.	7 12	4 33	9 21	0 17	7 16	11 1/2	—	Leo	5 22	0 13					
13	13	Fr.	7 12	4 34	9 22	0 18	7 17	0	0	Leo	6 32	1 03					
14	14	Sa.	7 12	4 36	9 24	0 20	7 18	0 1/2	0 3/4	Leo	7 42	1 50					
15	15	S.	7 11	4 37	9 26	0 22	6 19	1 1/4	1 1/2	Vir	8 51	2 36					
16	16	M.	7 11	4 38	9 27	0 23	6 20	2	2 1/4	Vir	10 01	3 21					
17	17	Tu.	7 10	4 39	9 29	0 25	6 21	2 3/4	3	Lib	11 13	4 06					
18	18	W.	7 10	4 40	9 30	0 26	5 22	3 1/2	4	Lib	morn	4 52					
19	19	Th.	7 9	4 41	9 32	0 28	5 23	4 1/4	4 3/4	Sco	0 27	5 42					
20	20	Fr.	7 8	4 42	9 34	0 30	5 24	5 1/4	6	Sco	1 45	6 35					
21	21	Sa.	7 8	4 44	9 36	0 32	4 25	6 1/4	7	Sgr	3 03	7 33					
22	22	S.	7 7	4 45	9 38	0 34	4 26	7 1/4	8	Sgr	4 19	8 36					
23	23	M.	7 6	4 47	9 41	0 37	4 27	8 1/2	9	Cap	5 28	9 41					
24	24	Tu.	7 6	4 48	9 42	0 38	4 28	9 1/2	10	Cap	6 25	10 45					
25	25	W.	7 5	4 49	9 44	0 40	3	10 1/4	11	Aqr	sets	11 45					
26	26	Th.	7 4	4 50	9 46	0 42	3 1	11 1/4	11 3/4	Aqr	5 46	0 40					
27	27	Fr.	7 3	4 52	9 49	0 45	3 2	—	0	Aqr	6 59	1 29					
28	28	Sa.	7 2	4 53	9 51	0 47	3 3	0 3/4	1	Psc	8 09	2 15					
29	29	S.	7 1	4 54	9 53	0 49	2 4	1 1/2	1 3/4	Psc	9 16	2 58					
30	30	M.	7 0	4 55	9 55	0 51	2 5	2 1/4	2 1/2	Ari	10 22	3 40					
31	31	Tu.	6 59	4 57	9 58	0 54	2 6	3	3 1/4	Ari	11 27	4 22					



What shall we pray, this Glad New Year,
 But this, that Happy We
 Each in his part may Happy make
 These holy regions three;
 Which be one's own, then neighborhood,
 And then the world away;
 Mayhap at last—sweet mystic bond!—
 All worlds in God that play.

J. V. BLAKE

D. M.	D. W.	Aspects, Holidays, Heights of High Water, etc.	Farmer's Calendar.
1	A	1st S. af. Chris. Circumcision. {8.9 9.5	Safeguard Your Savings
2	M.	Con Eq. Tides {8.8	Before you invest—investi-
3	Tu.	in Per. Tides {8.7	gate. This epitomizes the
4	W.	♂ ♂ ☾ Tides {8.3	soundest advice to be given the
5	Th.	Steamer San Francisco sank, 1854. Tides {8.6 7.8	prospective investor. The stock
6	Fr.	Epiphany. ☾ in Apogee. Tides {8.5 8.5	salesman who contacts you
7	Sa.	♀ in ☿. Tides {8.6 7.3	paints the brightest picture
8	A	1st S. af. Ep. ♃ Stat. {8.7	possible, but he tells you but
9	M.	☾ runs high. ☐ ♂ ☉. {7.4 8.9 7.5	one side of the story. In your
10	Tu.	♂ Gr. Hel. Tides {9.1	investigation, the government
11	W.	Francis S. Key, author of Star Spangled Banner, died, 1843. Tides {9.4 8.0	has provided you every aid,
12	Th.	Tides {9.6	principally through the medi-
13	Fr.	Tides {8.3	um of the "Blue Sky" laws,
14	Sa.	Tides {9.7	administered by a state depart-
15	A	2d S. af. Epip. ♂ ♃ ☾. {8.8 9.6	ment with headquarters at the
16	M.	☾ on Eq. ♂ ♂ ☾. ♂ ♃ ☾. Tides {9.0 9.5	state capital and branches in
17	Tu.	Tides {9.2	all the large cities. This effi-
18	W.	♀ in Aphelion. Tides {9.4 8.9	cient agency is at your dis-
19	Th.	Presidential Succession Law passed, 1836. {9.5 8.6	posal, ready to advise you on
20	Fr.	David Garrick, famous actor, died, 1779. Tides {9.6 8.4	any security offered you for
21	Sa.	♂ Stat. Tides {9.7 8.3	sale.
22	A	3d S. af. Epip. ☾ in Per. {10.0 8.3	Every salesman must have a
23	M.	☾ runs low. Tides {10.2 8.6	license from this department.
24	Tu.	♂ ♀ ☾. Tides {10.5 8.9	Ask him to produce it. If he
25	W.	Conversion of St. Paul. ♂ ♃ ☾. {10.7 9.2	can't, show him the door. If
26	Th.	♀ in ☿. Tides {10.8 9.4	he can, then the stock issue he
27	Fr.	♂ ♃ ☉. Tides {10.6	is selling must itself be ap-
28	Sa.	First train passed over Panama railroad, 1855. Tides {9.5 10.3	proved by this department.
29	A	4th S. af. Epip. ☾ on Eq. {9.5 9.9	Check this before you pay any
30	M.	Tides {9.3	money. Beware also of the
31	Tu.	♂ ♂ ☾. Tides {9.1 8.7	salesman who exhibits a license

JOSEPH J. HURLEY,
 Professor Boston College Law School;
 Legal Advisor, Old Farmer's Almanac.

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FEBRUARY, SECOND MONTH.

ASTRONOMICAL CALCULATIONS.

☉'s Declination.	Days	d. m.	Days.	d. m.	Days.	d. m.	Days.	d. m.	Days.	d. m.
	1	17s.	05	7	15 17	13	13 20	19	11 16	25	9 04
2	16	48	8	14 59	14	13 00	20	10 54	26	8 42
3	16	30	9	14 39	15	12 40	21	10 32	27	8 19
4	16	13	10	14 20	16	12 19	22	10 11	28	7 57
5	15	54	11	14 00	17	11 58	23	9 49		
6	15	36	12	13 41	18	11 37	24	9 27		

☽ First Quarter, 2nd day, 8h. 16m., morning, E.

☾ Full Moon, 10th day, 8h. 0m., morning, W.

☾ Last Quarter, 17th day, 9h. 8m., morning, W.

● New Moon, 24th day, 7h. 44m., morning, E.

Day of Year.	Day of Month.	Day of the Week.	☉		Length of Days.		Day's Incr.		Sun Past.	Moon's Age.	Full Sea, Boston.		☽'s Place	☽ Sets.	☽ Souths.
			Rises. h. m.	Sets. h. m.	h. m.	h. m.	h. m.	h. m.			Morn. h. m.	Even. h. m.			
32	1	W.	6 58	4 58	10 00	0 56	2 7	7	3 $\frac{3}{4}$	4	Tau	morn	5 5		
33	2	Th.	6 57	4 59	10 20	0 58	2 8	8	4 $\frac{1}{2}$	5	Tau	0 31	5 50		
34	3	Fr.	6 56	5 1	10 51	1 2	9	9	5 $\frac{1}{4}$	5 $\frac{3}{4}$	Tau	1 36	6 37		
35	4	Sa.	6 55	5 2	10 7	1 3	2 10	10	6 $\frac{1}{4}$	6 $\frac{3}{4}$	G'm	2 38	7 27		
36	5	S.	6 54	5 3	10 9	1 5	2 11	7	7 $\frac{3}{4}$	7 $\frac{3}{4}$	G'm	3 39	8 19		
37	6	M.	6 53	5 5	10 12	1 8	2 12	8	8	8 $\frac{1}{2}$	Cnc	4 33	9 12		
38	7	Tu.	6 52	5 6	10 14	1 10	1 13	13	8 $\frac{3}{4}$	9 $\frac{1}{2}$	Cnc	5 20	10 4		
39	8	W.	6 50	5 7	10 17	1 13	1 14	14	9 $\frac{1}{2}$	10	Cnc	5 59	10 55		
40	9	Th.	6 49	5 8	10 19	1 15	1 15	15	10 $\frac{1}{4}$	10 $\frac{3}{4}$	Leo	6 32	11 45		
41	10	Fr.	6 48	5 10	10 22	1 18	1 1	17	11 $\frac{3}{4}$	—	Vir	6 39	0 32		
42	11	Sa.	6 47	5 11	10 24	1 20	1 17	17	0	0 $\frac{1}{4}$	Vir	7 50	1 18		
43	12	S.	6 45	5 12	10 27	1 23	1 18	18	0 $\frac{3}{4}$	1	Lib	9 03	2 4		
44	13	M.	6 44	5 14	10 30	1 26	1 19	19	1 $\frac{1}{2}$	1 $\frac{3}{4}$	Lib	10 17	2 50		
45	14	Tu.	6 43	5 15	10 32	1 28	1 20	20	2 $\frac{1}{4}$	2 $\frac{3}{4}$	Sco	11 34	3 39		
46	15	W.	6 41	5 16	10 35	1 31	1 21	21	3	3 $\frac{1}{2}$	Sco	morn	4 31		
47	16	Th.	6 40	5 17	10 37	1 33	2 22	22	4	4 $\frac{1}{2}$	Sgr	0 51	5 27		
48	17	Fr.	6 39	5 19	10 40	1 36	2 23	23	5	5 $\frac{3}{4}$	Sgr	2 07	6 27		
49	18	Sa.	6 37	5 20	10 43	1 39	2 24	24	6	6 $\frac{3}{4}$	Sgr	3 17	7 30		
50	19	S.	6 36	5 21	10 45	1 41	2 25	25	7 $\frac{1}{4}$	8	Cap	4 17	8 32		
51	20	M.	6 34	5 23	10 49	1 45	2 26	26	8 $\frac{1}{4}$	9	Cap	5 05	9 32		
52	21	Tu.	6 33	5 24	10 51	1 47	2 27	27	9 $\frac{1}{4}$	9 $\frac{3}{4}$	Aqr	5 41	10 28		
53	22	W.	6 31	5 25	10 54	1 50	2 28	28	10	10 $\frac{3}{4}$	Aqr	6 10	11 19		
54	23	Th.	6 30	5 26	10 56	1 52	2 29	29	11	11 $\frac{1}{2}$	Psc	sets	0 6		
55	24	Fr.	6 28	5 28	11 0	1 56	2	30	11 $\frac{3}{4}$	—	Psc	6 58	0 50		
56	25	Sa.	6 27	5 29	11 2	1 58	3	1	0 $\frac{1}{4}$	0 $\frac{1}{2}$	Ari	8 04	1 33		
57	26	S.	6 25	5 30	11 5	2 1	3	2	1	1 $\frac{1}{4}$	Ari	9 10	2 15		
58	27	M.	6 24	5 31	11 7	2 3	3	3	1 $\frac{1}{2}$	2	Ari	10 15	2 58		
59	28	Tu.	6 22	5 33	11 11	2 7	3	4	2	2	Ari				



. . . Came cold February, sitting
 In an old wagon, for he could not ride,
 Drawn of two fishes, for the season fitting,
 Which through the flood before did softly slide
 And swim away; yet had he by his side
 His plough and harness fit to till the ground,
 And tools to prune the trees, before the pride
 Of hasting Prime did make them bourgeon round.

EDMUND SPENSER,

—“The Faerie Queene”

D. M.	D. W.	Aspects, Holidays, Heights of High Water, etc.	Farmer's Calendar.
1	W.	♂ ♀ ♄. Tides {8.8 8.0	<p>Timely Hints for The Farmer's Wife</p> <p>Melons should not have ice placed on the edible portion. They should be cooled either by setting them on a bed of ice or by placing in the refrigerator. If they are wrapped in wax paper the odor and taste will not permeate other foods.</p> <p>When two glass vessels get stuck together, so that there is danger of breaking them in getting them apart, put cold water in the inner one, and hold the outer one in warm water and you will find that they will separate at once.</p> <p>When the elbows of children's sweaters begin to wear thin, if the sleeves are carefully ripped out at the shoulders and the sleeves changed, the right one to the left arm and vice versa, the worn part will come in the hollow of the elbow and make the sleeves wear just twice as long.</p> <p>To improve the flavor of your meat gravies, add the water in which the potatoes have been boiled. If the water contains salt, your gravy will not need to be salted again.</p> <p>An unusual yet very effective use for kitchen shears is in shredding lettuce for salads. The outside, less attractive leaves can be served shredded.</p>
2	Th.	Purification of Virgin Mary. Tides {8.4 7.5	
3	Fr.	♄ in Apogee. {8.4 7.2 <i>Blustering</i>	
4	Sa.	Tides {8.3 7.0 <i>winds,</i>	
5	A	5th S. after Epip. ☾ runs {8.3 high. {7.0	
6	M.	Tides {8.5 7.2 <i>snow flurries.</i>	
7	Tu.	♀ Gr. Hel. ♂ ♀ ☉ Su. {8.8 7.5	
8	W.	Confederate States of America form provisional government, 1861. {9.1	
9	Th.	Naval engagement between Constellation and Insurgent, 1799. {7.9 8.4	
10	Fr.	Tides {9.7 8.8	
11	Sa.	♂ ♄ ☾. {9.8 [12th. ♂ ♃ ☾.	
12	A	Scp. Sun. ☾ on Eq. ♂ ♃ ☾. {9.2 9.9	
13	M.	Tides {9.5 9.3 <i>Warmer,</i>	
14	Tu.	St. Valentine. ♂ ♀ ♄. {9.8 9.6 <i>rain</i>	
15	W.	♂ in Aphelion. {9.9 9.2 <i>or snow.</i>	
16	Th.	"Unconditional surrender" of Fort Donelson to Grant, 1862. Tides {9.9 8.8	
17	Fr.	Michael Angelo died, 1564. Tides {9.7 8.4	
18	Sa.	☾ in Per. Tides {9.6 8.0 <i>Weather</i>	
19	A	Srx. S. ☾ runs {9.5 low. {8.0 <i>moderates,</i>	
20	M.	Conception, Chile, ruined by earthquake, 1835. {9.6 8.1 <i>high</i>	
21	Tu.	Indians attack Medfield, Mass., 1676. {9.8 8.5 <i>winds.</i>	
22	W.	♂ ♄ ☾. Tides {10.0 8.9	
23	Th.	♂ ♀ ☾. Tides {10.2 9.3	
24	Fr.	St. Matthias. ☉ Annular Eclipse, invisible in N. E. {10.3 9.6	
25	Sa.	☾ on Eq. ♂ ♄ ☾. {10.2 <i>Expect</i>	
26	A	Quinqua. S. ♀ in ♄. {9.7 10.0 <i>rain</i>	
27	M.	♄ ♄ ☉. Tides {9.7 9.6 <i>or sleet.</i>	
28	Tu.	Shrove Tues. ♂ ☉ ☾. {9.6 9.1	

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MARCH, THIRD MONTH.

ASTRONOMICAL CALCULATIONS.

☉'s Declination.	Days.	d. m.	Days.	d. m.	Days.	d. m.	Days.	d. m.	Days.	d. m.
	1	7s.	34	7	5 15	13	2 54	19	0 32	25	1 50
2	7	11	8	4 52	14	2 31	20	0s. 9	26	2 13
3	6	48	9	4 29	15	2 07	21	0N.15	27	2 37
4	6	25	10	4 05	16	1 43	22	0 39	28	3 00
5	6	02	11	3 42	17	1 20	23	1 02	29	3 24
6	5	39	12	3 18	18	0 56	24	1 26	30	3 47

☽ First Quarter, 4th day, 5h. 23m., morning, W.

☾ Full Moon, 11th day, 9h. 46m., evening, E.

☾ Last Quarter, 18th day, 4h. 5m., evening, W.

● New Moon, 25th day, 10h. 20m., evening, W.

Day of Year.	Day of Month.	Day of the Week.	☉		Length of Days.		Day's Incr.		Sun. East.	Moon's Age.	Full Sea, Boston.		☽'s Place	☽ Sets.		☽ Souths.
			Rises.	Sets.	h.	m.	h.	m.			h.	m.		h.	m.		h.	m.
60	1	W.	6 20	5 34	11 14	2 10	3 5	2 1/4	2 3/4	Tau	11 21	3 43				
61	2	Th.	6 19	5 35	11 16	2 12	3 6	3	3 1/2	Tau	morn	4 29				
62	3	Fr.	6 17	5 36	11 19	2 15	4 7	3 3/4	4 1/4	G'm	0 25	5 18				
63	4	Sa.	6 16	5 37	11 21	2 17	4 8	4 1/2	5 1/4	G'm	1 27	6 09				
64	5	S.	6 14	5 39	11 25	2 21	4 9	5 1/2	6 1/4	G'm	2 23	7 01				
65	6	M.	6 12	5 40	11 28	2 24	4 10	6 1/2	7	Cnc	3 13	7 53				
66	7	Tu.	6 11	5 41	11 30	2 26	5 11	7 1/4	8	Cnc	3 55	8 45				
67	8	W.	6 9	5 42	11 33	2 29	5 12	8 1/4	8 3/4	Leo	4 29	9 35				
68	9	Th.	6 7	5 43	11 36	2 32	5 13	9	9 1/2	Leo	4 59	10 23				
69	10	Fr.	6 6	5 44	11 38	2 34	5 14	9 3/4	10 1/4	Vir	5 24	11 10				
70	11	Sa.	6 4	5 46	11 42	2 38	6	10 1/2	11	Vir	rises	11 56				
71	12	S.	6 2	5 47	11 45	2 41	6 16	11 1/4	11 1/2	Vir	6 45	morn				
72	13	M.	6 0	5 48	11 48	2 44	6 17	—	0	Lib	8 01	0 44				
73	14	Tu.	5 59	5 49	11 50	2 46	6 18	0 1/4	0 3/4	Lib	9 19	1 33				
74	15	W.	5 57	5 50	11 53	2 49	7 19	1	1 1/2	Sco	10 40	2 25				
75	16	Th.	5 55	5 51	11 56	2 52	7 20	1 3/4	2 1/2	Sco	11 58	3 21				
76	17	Fr.	5 53	5 53	12 0	2 56	7 21	2 3/4	3 1/4	Sgr	morn	4 21				
77	18	Sa.	5 52	5 54	12 2	2 58	8 22	3 3/4	4 1/4	Sgr	1 10	5 24				
78	19	S.	5 50	5 55	12 5	3 1	8 23	4 3/4	5 1/2	Cap	2 13	6 26				
79	20	M.	5 48	5 56	12 8	3 4	8 24	5 3/4	6 1/2	Cap	3 02	7 26				
80	21	Tu.	5 47	5 57	12 10	3 6	8 25	7	7 3/4	Aqr	3 42	8 22				
81	22	W.	5 45	5 58	12 13	3 9	9 26	8	8 3/4	Aqr	4 12	9 13				
82	23	Th.	5 43	6 0	12 17	3 13	9 27	9	9 1/2	Psc	4 37	10 01				
83	24	Fr.	5 41	6 1	12 20	3 16	9 28	9 3/4	10 1/4	Psc	4 58	10 45				
84	25	Sa.	5 40	6 2	12 22	3 18	10	●	10 3/4	Ari	sets	11 28				
85	26	S.	5 38	6 3	12 25	3 21	10	1	11 1/2	Ari	6 54	0 10				
86	27	M.	5 36	6 4	12 28	3 24	10	2	—	Ari	8 00	0 52				
87	28	Tu.	5 34	6 5	12 31	3 27	11	3	0 1/4	0 3/4	Tau	9 06	1 36			
88	29	W.	5 33	6 6	12 33	3 29	11	4	1	1 1/2	Tau	10 11	2 22			
89	30	Th.	5 31	6 7	12 36	3 32	11	5	1 1/2	2	G'm	11 14	3 10			
90	31	Fr.	5 29	6 9	12 40	3 36	11	6	2 1/4	2 3/4	G'm	morn	4 00			



The stormy March is come at last,
 With wind, and cloud, and changing skies;
 I hear the rushing of the blast
 That through the snowy valley flies.
 Ah, passing few are they who speak,
 Wild, stormy month, in praise of thee;
 Yet though thy winds are loud and bleak,
 Thou art a welcome month to me.

WILLIAM CULLEN BRYANT

D. M.	D. W.	Aspects, Holidays, Heights of High Water, etc.	Farmer's Calendar.
1	W.	Ash Wed. St. David. Tides {9.3 8.5	<p>Precautions in Buying Seed</p> <p>In these days of close margins of profit for the farmer, unusual care should be taken in buying only the best quality of seeds. It is poor economy to buy any kind of seed just because it is cheap. Frequently seeds are offered at a low price because they are old or because of impurities of weeds, dirt and chaff.</p> <p>The following five precautions should be observed:—</p> <ol style="list-style-type: none"> 1. Insist on a statement of the percentage of germination and of the date when the test was made. Some seeds deteriorate rapidly in vitality if not properly stored. 2. Be sure that the seed is not below the usual standard of purity for that particular kind. 3. As a rule, buy only those seeds which you know are adapted to your locality. If in doubt, get the advice of your state experiment station. 4. If you have any reason to suspect that the seed you buy is not as represented as to purity and vitality, send a sample to your experiment station for testing. 5. Always beware of seed offered at abnormally low prices. Be certain of the quality before buying.
2	Th.	{9.0 8.0 [1st. ♀ ☉ ♀ in Aph.	
3	Fr.	☾ in Apo. ☽ in Per. Tides {9.7 7.5	
4	Sa.	Pres. of the U. S. inaugurated {8.4 7.2 [3d. ♂ nearest ⊕	
5	A	1st S. in Lent. ☾ runs high. {8.2 7.1 Look	
6	M.	♀ Gr. Elong. East Tides {8.2 7.1 for Snow.	
7	Tu.	Florida admitted to Union, 1844. {8.4 7.4 Weather	
8	W.	Pope Clement XI died, 1721. {8.7 7.8 moderates,	
9	Th.	♂ ♀ ☉. Tides {9.1 8.4 probably	
10	Fr.	Tides {9.5 9.0 a thaw.	
11	Sa.	♂♂Ψ. ♂♂☾. ♂Ψ☾, ♂♀☾. {9.8 9.6	
12	A	2nd S. in Lent. ☾ on Eq. {10.0 10.0	
13	M.	♀ Stat. ♀ Gr. Hel. Lat. N. Tides {10.0 —	
14	Tu.	Tides {10.4 9.9 Cold,	
15	W.	☾ in Peri. Tides {10.5 9.6 westerly	
16	Th.	Military institution established at West Point, 1802. {10.5 9.2	
17	Fr.	St. Patrick. Tides {10.2 8.7 winds,	
18	Sa.	☾ runs low. Tides {9.8 8.3 bright	
19	A	3d S. in Lent. Tides {9.5 8.0 sun.	
20	M.	☉ enters. ♀ Spring commences Tides {9.3 8.0	
21	Tu.	St. Benedict. ♂ ♀ ☾. Tides {9.3 8.3	
22	W.	Massacre of 347 Colonists by the Indians, 1622. Tides {9.4 8.7	
23	Th.	♂ ♀ ☉ Inferior. Tides {8.6 9.1	
24	Fr.	♀ Gr. Hel. Lat. S. {9.7 9.5 Rain or snow,	
25	Sa.	Annunc. or Lady Day. ☾ on Eq. ♂ ♀ ☾. {9.7 9.3	
26	A	4th S. in Lent. {9.7 9.9 [♂♀☾. ♂♀♀.	
27	M.	♂ ☉ ☾. Tides {9.5 —	
28	Tu.	Planet Pallas discovered, 1802. Tides {9.8 9.2	
29	W.	Gen. Foch made commander-in-chief of allied forces, 1918. {9.7 8.3	
30	Th.	Tides {9.5 8.4 Colder.	
31	Fr.	☾ in Apogee. Tides {9.2 8.0	

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APRIL, FOURTH MONTH.

ASTRONOMICAL CALCULATIONS.

☉'s Declination.	Days.	d. m.	Days.	d. m.	Days.	d. m.	Days.	d. m.	Days.	d. m.
	1	4N.	33	7	6 51	13	9 4	19	11 11	25	13 12
2	4	58	8	7 13	14	9 25	20	11 32	26	13 32
3	5	20	9	7 35	15	9 47	21	11 52	27	13 51
4	5	42	10	7 58	16	10 8	22	12 13	28	14 10
5	6	05	11	8 20	17	10 29	23	12 32	29	14 29
6	6	28	12	8 42	18	10 50	24	12 52	30	14 47

☽ First Quarter, 3rd day, 0h. 56m., morning, W.

☾ Full Moon, 10th day, 8h. 38m., morning, W.

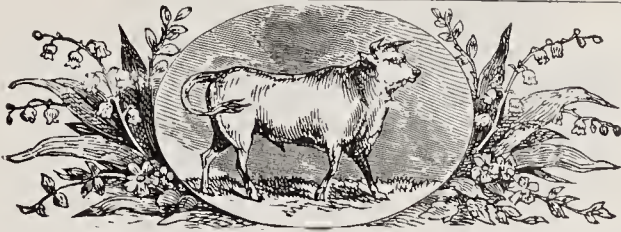
☾ Last Quarter, 16th day, 11h. 17m., evening, E.

● New Moon, 24th day, 1h. 38m., evening, W.

Day of Year.	Day of Month.	Day of the Week.	☉		Length of Days.	Day's Incr.	Sun East.	Moon's Age.	Full Sea, Boston.		☽'s Place	☽		☽	
			Rises.	Sets.					Morn	Even		Sets.	Souths		
91	1	Sa.	5 27	6 10	12 43	3 39	12 7	3	3 $\frac{3}{4}$	G'm	0 13	4 52			
92	2	S.	5 26	6 11	12 45	3 41	12 8	4	4 $\frac{1}{2}$	Cnc	1 05	5 43			
93	3	M.	5 24	6 12	12 48	3 44	12 9	4 $\frac{3}{4}$	5 $\frac{1}{2}$	Cnc	1 50	6 34			
94	4	Tu.	5 22	6 13	12 51	3 47	13 10	5 $\frac{1}{4}$	6 $\frac{1}{2}$	Leo	2 27	7 24			
95	5	W.	5 21	6 14	12 53	3 49	13 11	5 $\frac{3}{4}$	7 $\frac{1}{4}$	Leo	2 58	8 12			
96	6	Th.	5 19	6 15	12 56	3 52	13 12	7 $\frac{1}{2}$	8 $\frac{1}{4}$	Leo	3 24	8 59			
97	7	Fr.	5 17	6 16	12 59	3 55	13 13	8 $\frac{1}{2}$	9	Vir	3 47	9 45			
98	8	Sa.	5 16	6 18	13 2	3 58	14 14	9 $\frac{1}{4}$	9 $\frac{3}{4}$	Vir	4 09	10 32			
99	9	S.	5 14	6 19	13 5	4 1	14 15	10	10 $\frac{1}{2}$	Lib	4 31	11 21			
100	10	M.	5 12	6 20	13 8	4 4	14	○	10 $\frac{3}{4}$	Lib	rises	morn			
101	11	Tu.	5 11	6 21	13 10	4 6	15 17	11 $\frac{3}{4}$	—	Sco	8 17	0 13			
102	12	W.	5 9	6 22	13 13	4 9	15 18	0	0 $\frac{1}{2}$	Sco	9 39	1 10			
103	13	Th.	5 7	6 23	13 16	4 12	15 19	0 $\frac{3}{4}$	1 $\frac{1}{4}$	Sgr	10 57	2 10			
104	14	Fr.	5 6	6 24	13 18	4 14	15 20	1 $\frac{1}{2}$	2 $\frac{1}{4}$	Sgr	morn	3 14			
105	15	Sa.	5 4	6 25	13 21	4 17	16 21	2 $\frac{1}{2}$	3 $\frac{1}{4}$	Cap	0 05	4 18			
106	16	S.	5 2	6 27	13 25	4 21	16 22	3 $\frac{1}{2}$	4 $\frac{1}{4}$	Cap	1 00	5 21			
107	17	M.	5 1	6 28	13 27	4 23	16 23	4 $\frac{1}{2}$	5 $\frac{1}{4}$	Aqr	1 43	6 18			
108	18	Tu.	4 59	6 29	13 30	4 26	16 24	5 $\frac{1}{2}$	6 $\frac{1}{2}$	Aqr	2 16	7 11			
109	19	W.	4 58	6 30	13 32	4 28	17 25	6 $\frac{3}{4}$	7 $\frac{1}{2}$	Psc	2 42	7 59			
110	20	Th.	4 56	6 31	13 35	4 31	17 26	7 $\frac{3}{4}$	8 $\frac{1}{4}$	Psc	3 04	8 44			
111	21	Fr.	4 55	6 32	13 37	4 33	17 27	8 $\frac{3}{4}$	9 $\frac{1}{4}$	Psc	3 24	9 26			
112	22	Sa.	4 53	6 33	13 40	4 36	17 28	9 $\frac{1}{2}$	9 $\frac{3}{4}$	Ari	3 43	10 08			
113	23	S.	4 51	6 34	13 43	4 39	17 29	10 $\frac{1}{4}$	10 $\frac{1}{2}$	Ari	4 02	10 50			
114	24	M.	4 50	6 36	13 46	4 42	18	●	11	11 $\frac{1}{4}$	Tau	sets	11 33		
115	25	Tu.	4 48	6 37	13 49	4 45	18 1	11 $\frac{1}{2}$	11 $\frac{3}{4}$	Tau	8 00	0 18			
116	26	W.	4 47	6 38	13 51	4 47	18 2	—	0 $\frac{1}{4}$	Tau	9 03	1 05			
117	27	Th.	4 46	6 39	13 53	4 49	18 3	0 $\frac{1}{2}$	1	G'm	10 03	1 54			
118	28	Fr.	4 44	6 40	13 56	4 52	18 4	1	1 $\frac{3}{4}$	G'm	10 58	2 45			
119	29	Sa.	4 43	6 41	13 58	4 54	18 5	1 $\frac{3}{4}$	2 $\frac{1}{4}$	Cnc	11 45	3 36			
120	30	S.	4 41	6 42	14 1	4 57	19 6	2 $\frac{1}{2}$	3 $\frac{1}{4}$	Cnc	morn	4 27			

APRIL hath 30 days.

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April is here!
 Blithest season of all the year.
 The little brook laughs as it leaps away;
 The lambs are out on the hills at play;
 The warm south wind sings, the whole day long,
 The merriest kind of a wordless song.
 Gladness is born of the April weather,
 And the heart is as light as a wind-tossed feather.

MARY I. LOVEJOY

D. M.	D. W.	Aspects, Holidays, Heights of High Water, Etc.	Farmer's Calendar.
1	Sa.	☾ runs high. Tides { ^{8.8} _{7.6}	Carelessness. Does it Pay? What is more powerful than armies and more destructive than high explosives? In our country there is something which steals millions of dollars each year. It brings sickness. It maims, crushes, and destroys. It is relentless. It gives nothing, but takes all. It is one of our worst enemies. It is everywhere, on the street, in the factory, and in the home. It exacts a tremendous toll on the farm. It is a monster of frightful mein. Its name is CARELESSNESS. The postponement of needed repairs for buildings or equipment is a costly practice. Machinery which is housed lasts twice as long as that which is exposed to the weather. Cleaning and oiling of farm implements prolongs their usefulness. Neglected fences and straying animals ruin promising crops. Fire hazards always constitute a disturbing uncertainty. Even during prosperous times bankers were reluctant to extend assistance where gross carelessness prevailed. Poisonings of farm animals are numerous and in many instances are due to carelessness and indifference. Spraying materials, poisons for rodents, fertilizers, and paint containers should be stored and used in such a way as not to expose animals to them.
2	A	5th S. in Lent. Tides { ^{8.5} _{7.4}	
3	M.	Washington Irving born, 1783. Tides { ^{8.8} _{7.3}	
4	Tu.	☽ Stationary. Tides { ^{8.3} _{7.5}	
5	W.	☽ in ☽. Tides { ^{8.5} _{7.8}	
6	Th.	♂ ♂ ☾. Tides { ^{8.8} _{8.4}	
7	Fr.	♂ ♀ ☾. ♂ ♀ ☾. { ^{9.1} _{9.1} Southerly	
8	Sa.	☾ on Equator. { ^{9.5} _{9.7} followed	
9	A	Palm Sunday. Tides { ^{9.8} _{10.3} by	
10	M.	Tides { ^{10.0} _{10.8} northerly winds.	
11	Tu.	Peace of Utrecht, 1713. Tides { ^{10.0} _{11.1}	
12	W.	☾ in Perigee. Tides { ^{9.9} _{11.1}	
13	Th.	♂ Stationary. ♂ ♂ ☾. { ^{11.1} _{9.6}	
14	Fr.	Good Friday. ☾ runs low. { ^{10.9} _{9.2}	
15	Sa.	♂ ♀ ♂. { ^{10.4} _{8.8} Occasional showers.	
16	A	Easter Sun. ☽ in Aph. { ^{9.9} _{8.4}	
17	M.	Benjamin Franklin died, 1790. Tides { ^{9.5} _{8.3}	
18	Tu.	♂ ♀ ☾. Tides { ^{9.2} _{8.4} Springlike	
19	W.	Tides { ^{9.0} _{8.6} days.	
20	Th.	☽ Gr. Elong. W. Tides { ^{9.0} _{9.0}	
21	Fr.	☾ on Eq. ♂ ♀ ☾ Sup. { ^{9.1} _{9.3}	
22	Sa.	♂ ♀ ☾. Tides { ^{9.1} _{9.6}	
23	A	Low Sunday. St. George. { ^{9.1} _{9.8}	
24	M.	♂ ♀ ☾. { ^{9.1} _{9.9} [23d. ♂ ♂ ☾.	
25	Tu.	St. Mark. Tides { ^{9.0} _{9.9} Cool	
26	W.	Last Confederate Army surrenders, 1865. { [—] _{8.8} northerly	
27	Th.	☾ in Apogee. Tides { ^{9.7} _{8.5} winds,	
28	Fr.	☾ runs high. James Monroe born, 1758. Tides { ^{9.5} _{8.3}	
29	Sa.	Tides { ^{9.3} _{8.0} followed by	
30	A	2d Sun. af. Easter. { ^{9.0} _{7.8} rain.	

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MAY, FIFTH MONTH.

ASTRONOMICAL CALCULATIONS.

☉'s Declination.	Days.	d. m.	Days.	d. m.	Days.	d. m.	Days.	d. m.	Days.	d. m.
	1	15N	5	7	16 50	13	18 24	19	19 47	25
2	15	23	8	17 6	14	18 38	20	19 59	26	21 8
3	15	41	9	17 22	15	18 53	21	20 12	27	21 18
4	15	59	10	17 33	16	19 7	22	20 24	28	21 28
5	16	16	11	17 53	17	19 20	23	20 35	29	21 38
6	16	33	12	18 9	18	19 34	24	20 47	30	21 47

☽ First Quarter, 2nd day, 5h. 39m., evening, E.

☾ Full Moon, 9th day, 5h. 4m., evening, E.

☾ Last Quarter, 16th day, 7h. 50m., morning, W.

● New Moon, 24th day, 5h. 7m., morning, E.

Day of Year.	Day of Month.	Day of the Week.	☉		Length of Days.	Day's Incr.	Sun Past.	Moon's Age.	Full Sea, Boston.		☽'s Place	☽ Sets.	☽ Souths.
			Rises. h. m.	Sets. h. m.					Morn h.	Even h.				h. m.	h. m.
121	1	M.	4 40	6 43	14 34	59	19 7	3 $\frac{1}{4}$	4	Cnc	0 24	5 16	
122	2	Tu.	4 39	6 44	14 55	19	8 4 $\frac{1}{4}$	4 $\frac{5}{4}$	4	Leo	0 57	6 04	
123	3	W.	4 37	6 46	14 9	5 19	9 5	5 $\frac{3}{4}$	4	Leo	1 24	6 50	
124	4	Th.	4 36	6 47	14 11	5 7	19 10	6 6 $\frac{1}{2}$	4	Vir	1 48	7 35	
125	5	Fr.	4 35	6 48	14 13	5 9	19 11	7 7 $\frac{1}{2}$	4	Vir	2 09	8 21	
126	6	Sa.	4 33	6 49	14 16	5 12	19 12	7 $\frac{3}{4}$	8 $\frac{1}{4}$	Lib	2 31	9 08	
127	7	S.	4 32	6 50	14 18	5 14	19 13	8 $\frac{3}{4}$	9	Lib	2 53	9 58	
128	8	M.	4 31	6 51	14 20	5 16	19 14	9 $\frac{1}{2}$	9 $\frac{3}{4}$	Sco	3 18	10 52	
129	9	Tu.	4 30	6 52	14 22	5 18	19 16	10 $\frac{1}{2}$	10 $\frac{3}{4}$	Sco	rises	11 51	
130	10	W.	4 29	6 53	14 24	5 20	19 16	11 $\frac{1}{4}$	11 $\frac{1}{2}$	Sgr	8 33	morn	
131	11	Th.	4 27	6 54	14 27	5 23	19 17	—	0 $\frac{1}{4}$	Sgr	9 48	0 56	
132	12	Fr.	4 26	6 55	14 29	5 25	20 18	0 $\frac{1}{4}$	1	Cap	10 51	2 03	
133	13	Sa.	4 25	6 56	14 31	5 27	20 19	1 $\frac{1}{4}$	2	Cap	11 39	3 08	
134	14	S.	4 24	6 57	14 33	5 29	20 20	2 $\frac{1}{4}$	3	Aqr	morn	4 10	
135	15	M.	4 23	6 58	14 35	5 31	20 21	3 $\frac{1}{4}$	4	Aqr	0 17	5 06	
136	16	Tu.	4 22	6 59	14 37	5 33	20 22	4 $\frac{1}{4}$	5	Aqr	0 45	5 56	
137	17	W.	4 21	7 0	14 39	5 35	20 23	5 $\frac{1}{4}$	6	Psc	1 08	6 42	
138	18	Th.	4 20	7 1	14 41	5 37	19 24	6 $\frac{1}{2}$	7	Psc	1 29	7 26	
139	19	Fr.	4 19	7 2	14 43	5 39	19 25	7 $\frac{1}{2}$	8	Ari	1 49	8 07	
140	20	Sa.	4 18	7 3	14 45	5 41	19 26	8 $\frac{1}{4}$	8 $\frac{3}{4}$	Ari	2 08	8 49	
141	21	S.	4 17	7 4	14 47	5 43	19 27	9 $\frac{1}{4}$	9 $\frac{1}{4}$	Tau	2 29	9 31	
142	22	M.	4 17	7 5	14 48	5 44	19 28	9 $\frac{3}{4}$	10	Tau	2 51	10 15	
143	23	Tu.	4 16	7 6	14 50	5 46	19 29	10 $\frac{1}{2}$	10 $\frac{3}{4}$	Tau	3 19	11 01	
144	24	W.	4 15	7 7	14 52	5 48	19 ●	11 $\frac{1}{4}$	11 $\frac{1}{4}$	G'm	sets	11 50	
145	25	Th.	4 14	7 8	14 54	5 50	19 1	11 $\frac{3}{4}$	—	G'm	8 52	0 40	
146	26	Fr.	4 14	7 9	14 55	5 51	19 2	0	0 $\frac{1}{2}$	G'm	9 42	1 32	
147	27	Sa.	4 13	7 10	14 57	5 53	19 3	0 $\frac{1}{2}$	1 $\frac{1}{4}$	Cnc	10 23	2 23	
148	28	S.	4 12	7 11	14 59	5 55	19 4	1 $\frac{1}{4}$	2	Cnc	10 57	3 12	
149	29	M.	4 12	7 12	15 0	5 56	19 5	2	2 $\frac{3}{4}$	Leo	11 26	4 00	
150	30	Tu.	4 11	7 13	15 2	5 58	18 6	2 $\frac{3}{4}$	3 $\frac{1}{2}$	Leo	11 51	4 45	
151	31	W.	4 11	7 13	15 2	5 58	18 7	3 $\frac{1}{2}$	4 $\frac{1}{4}$	Vir	morn	5 29	



When the south wind, in May days,
With a net of shining haze
Silvers the horizon wall,
And, with softness touching all,
Tints the human countenance
With a color of romance,

And, infusing subtle heats,
Turns the sod to violets,
Thou, in sunny solitudes,
Rover of the underwoods,
The green silence dost displace
With thy mellow, breezy bass.

HENRY WADSWORTH LONGFELLOW.

D. M.	D. W.	Aspects, Holidays, Heights of High Water, etc.	Farmer's Calendar.
1	M.	St. Philip & St. James.	A New Farm Crop.
2	Tu.	Columbus discovered island of Jamaica, 1494.	More than seven millions of hunters are in the field each fall. Disregard for private property by a portion of this large number of hunters is responsible to some extent for the rapidly increasing area of private lands posted against trespassing. Farmer-hunter relations, pleasant in some sections and unpleasant in others, also have a bearing upon the amount of posted hunting grounds.
3	W.	Italy denounced Triple Alliance, 1915	
4	Th.	♂ ♂ ♄. ♂ ♀ ♄. {8.6 Some	
5	Fr.	♂ ♃ ♄. Tides {8.8 warm days.	
6	Sa.	♄ on Eq. ♀ Gr. Hel. Lat. S. ♂ ♃ ♂. {9.1	
7	A	3d. S. af. Eas. {9.4 [6th. ☐ h ☉.	
8	M.	Battle of Palo Alto, 1846. {10.3 Northerly	
9	Tu.	John Brown born, 1800. Tides {9.8 to	
10	W.	♄ in Per. ♃ Stat. Tides {11.3	
11	Th.	Tides {9.8 easterly winds.	
12	Fr.	♄ runs low. Tides {11.4	
13	Sa.	Foundation of Jamestown, 1607. Tides {11.1	
14	A	4th S. af. Eas. {10.6 Showers	
15	M.	♂ ♃ ♄. Tides {10.0 followed by	
16	Tu.	♂ ♂ ♀. Tides {9.5 colder	
17	W.	John Jay died, 1829. {9.1 weather.	
18	Th.	♄ on Equator. Tides {8.8	
19	Fr.	♀ Stat. ♀ in ♄. Tides {8.6	
20	Sa.	Tides {8.5 Milder weather.	
21	A	Rog. Sun. ♂ ♂ ♄. Tides {8.4	
22	M.	First steamship to cross Atlantic leaves America, 1819. {8.4	
23	Tu.	♂ ♃ ♄. Tides {8.4	
24	W.	Famous scientist, Linnaeus, born, 1707. Tides {8.4	
25	Th.	Ascen. Day. ♄ in Apo. {8.4	
26	Fr.	♄ runs high. {9.7 [25th. ♂ ♃ ♄. ♀ in ♄. {8.3	
27	Sa.	♃ Stationary. {9.6 Variable,	
28	A	S. af. Ascen. ♂ ♃ ☉. Su. {9.4	
29	M.	♄ ♀ ☉. Tides {9.2 perhaps rain.	
30	Tu.	♃ in Perihelion. Tides {9.0	
31	W.	Tides {8.9	

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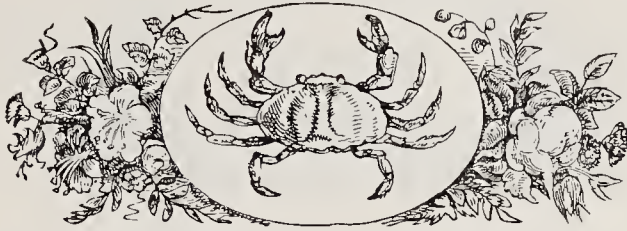
JUNE, SIXTH MONTH.

ASTRONOMICAL CALCULATIONS.

☉'s Declination.	Days.	d. m.	Days.	d. m.	Days.	d. m.	Days.	d. m.	Days.	d. m.
	1	22	N. 4	7	22 46	13	23 13	19	23 26	25
2	22	12	8	22 51	14	23 16	20	23 27	26	23 22
3	22	19	9	22 56	15	23 19	21	23 27	27	23 20
4	22	27	10	23 1	16	23 21	22	23 27	28	23 17
5	22	33	11	23 6	17	23 23	23	23 26	29	23 14
6	22	40	12	23 10	18	23 25	24	23 25	30	23 11

- ☽ First Quarter, 1st day, 6h. 53m., morning, E.
 ○ Full Moon, 8th day, 0h. 5m., morning, W.
 ☾ Last Quarter, 14th day, 6h. 26m., evening, E.
 ● New Moon, 22nd day, 8h. 22m., evening, W.
 ☽ First Quarter, 30th day, 4h. 40m., evening, E.

Day of Year.	Day of Month.	Day of the Week.	☉		Length of Days.		Day's Incr.		Sun Fast.	Moon's Age.	Full Sea. Boston.		☽'s Place.	☽ Sets.		☽ Souths.
			Rises. h. m.	Sets. h. m.	h.	m.	h.	m.			Morn.	Even.		h.	m.	
152	1	Th.	4 10	7 14	15 4	6 18	8 0	18 8	4½	5	Vir	0 12	6 13			
153	2	Fr.	4 10	7 15	15 5	6 18	9 1	18 9	5¼	6	Vir	0 33	6 58			
154	3	Sa.	4 9	7 16	15 7	6 3	18 10	10 6¼	6¾	Lib	0 54	7 45				
155	4	S	4 9	7 16	15 7	6 3	18 11	11 7¼	7¾	Lib	1 16	8 37				
156	5	M.	4 8	7 17	15 9	6 5	17 12	12 8¼	8½	Sco	1 43	9 32				
157	6	Tu.	4 8	7 18	15 10	6 6	17 13	13 9¼	9½	Sco	2 16	10 33				
158	7	W.	4 8	7 18	15 10	6 6	17 14	14 10	10¼	Sgr	3 00	11 40				
159	8	Th.	4 7	7 19	15 12	6 8	17 17	17 11	11¼	Sgr	rises	morn				
160	9	Fr.	4 7	7 20	15 13	6 9	17 16	16 —	0	Cap	9 29	0 48				
161	10	Sa.	4 7	7 20	15 13	6 9	17 17	17 0	0¾	Cap	10 12	1 54				
162	11	S	4 7	7 21	15 14	6 10	16 18	18 1	1¾	Aqr	10 46	2 54				
163	12	M.	4 7	7 21	15 14	6 10	16 19	19 2	2¾	Aqr	11 12	3 49				
164	13	Tu.	4 7	7 22	15 15	6 11	16 20	20 3	3½	Psc	11 34	4 38				
165	14	W.	4 7	7 22	15 15	6 11	16 21	21 4	4½	Psc	11 54	5 23				
166	15	Th.	4 7	7 23	15 16	6 12	16 22	22 5	5½	Ari	morn	6 06				
167	16	Fr.	4 7	7 23	15 16	6 12	15 23	23 6	6½	Ari	0 14	6 48				
168	17	Sa.	4 7	7 23	15 16	6 12	15 24	24 7	7¼	Ari	0 34	7 30				
169	18	S	4 7	7 24	15 17	6 13	15 25	25 7¾	8	Tau	0 56	8 13				
170	19	M.	4 7	7 24	15 17	6 13	15 26	26 8¾	8¾	Tau	1 22	8 59				
171	20	Tu.	4 7	7 24	15 17	6 13	14 27	27 9½	9½	G'm	1 53	9 47				
172	21	W.	4 7	7 24	15 17	6 13	14 28	28 10	10¼	G'm	2 31	10 37				
173	22	Th.	4 7	7 25	15 18	Dec. 14	●	14 10¾	10¾	G'm	sets	11 28				
174	23	Fr.	4 8	7 25	15 17	0 1	14 1	1 11½	11½	Cnc	8 23	0 17				
175	24	Sa.	4 8	7 25	15 17	0 1	14 2	2 —	0¼	Cnc	8 59	1 09				
176	25	S	4 8	7 25	15 17	0 1	13 3	3 0¼	0¾	Leo	9 29	1 57				
177	26	M.	4 9	7 25	15 16	0 2	13 4	4 1	1½	Leo	9 55	2 43				
178	27	Tu.	4 9	7 25	15 16	0 2	13 5	5 1½	2¼	Leo	10 17	3 28				
179	28	W.	4 9	7 25	15 16	0 2	13 6	6 2½	2¾	Vir	10 37	4 11				
180	29	Th.	4 10	7 25	15 15	0 3	13 7	7 3	3¾	Vir	10 57	4 54				
181	30	Fr.	4 10	7 25	15 15	0 3	12 8	8 4	4½	Lib	11 19	5 39				



O fields in June's fair verdure drest,
 And vocal now with birds and bees!
 A toiler from the world's highways
 I turn, with willing feet, to these,
 Inhaling here the morning breeze.

HENRY STEVENSON WASHBURN

D. M.	D. W.	Aspects, Holidays, Heights of High Water, etc.	Farmer's Calendar.
1	Th.	Nicomede. $\delta \Psi \zeta$. $\left\{ \begin{smallmatrix} 8.7 \\ 8.6 \end{smallmatrix} \right.$ Sultry.	<p>Eradicating Poison Ivy</p> <p>If you have any poison ivy growing around the house, yard or garden, the best way to avoid a case of poisoning is to eradicate the plants.</p> <p>One of the easiest ways to do this is to spray the plants with a solution of 3 pounds of common salt to a gallon of slightly soapy water. The first spraying should be done the latter part of June. Since one spraying will not kill the main stems and roots, the plants should be sprayed again as soon as the second set of new leaves are about full grown. Sometimes a third spraying is necessary.</p> <p>Old crank case oil thinned with kerosene is also an effective spray. Care, however, must be taken to keep the oil away from the bark of valuable trees. Ivy climbing on posts or trees may be cut off just above the ground, and the new plants coming from the roots may then be killed with the spray. An advantage of the spray method is that one may avoid direct contact with the plant.</p> <p>In burning dried, uprooted plants, care should be taken to keep away from the poisonous smoke.</p>
2	Fr.	ζ on Eq. $\left\{ \begin{smallmatrix} 8.7 \\ 9.0 \end{smallmatrix} \right.$ [1 st . $\delta \delta \zeta$. $\delta \Psi \zeta$.	
3	Sa.	First steam vessel from England to Boston arrived, 1840. $\left\{ \begin{smallmatrix} 8.8 \\ 9.6 \end{smallmatrix} \right.$	
4	A	Whit Sunday. $\delta \delta \Psi$. $\left\{ \begin{smallmatrix} 8.9 \\ 10.1 \end{smallmatrix} \right.$	
5	M.	$\square \Psi \odot$. $\square \delta \odot$. $\left\{ \begin{smallmatrix} 9.1 \\ 10.7 \end{smallmatrix} \right.$ Indica-	
6	Tu.	Cleveland renominated, 1888. $\left\{ \begin{smallmatrix} 9.3 \\ 11.1 \end{smallmatrix} \right.$ tions	
7	W.	ζ in Perigee. $\left\{ \begin{smallmatrix} 9.5 \\ 11.4 \end{smallmatrix} \right.$ of showers.	
8	Th.	ζ runs low. $\delta \delta \Psi$. $\left\{ \begin{smallmatrix} 9.6 \\ 11.6 \end{smallmatrix} \right.$ Cool	
9	Fr.	Ψ Gr. Hel. Lat. N. Tides $\left\{ \begin{smallmatrix} 9.6 \\ 9.6 \end{smallmatrix} \right.$ for the	
10	Sa.	Tides $\left\{ \begin{smallmatrix} 11.5 \\ 9.6 \end{smallmatrix} \right.$ season.	
11	A	Trin. S. St. Barnabas. $\delta \delta \zeta$. $\left\{ \begin{smallmatrix} 11.2 \\ 9.4 \end{smallmatrix} \right.$	
12	M.	Calvin Coolidge nominated for president, 1924. $\left\{ \begin{smallmatrix} 10.7 \\ 9.3 \end{smallmatrix} \right.$	
13	Tu.	First division embarked for France, 1917. Tides $\left\{ \begin{smallmatrix} 10.1 \\ 9.1 \end{smallmatrix} \right.$ A	
14	W.	ζ on Equator. Tides $\left\{ \begin{smallmatrix} 9.5 \\ 9.0 \end{smallmatrix} \right.$ few	
15	Th.	Corpus Christi. Tides $\left\{ \begin{smallmatrix} 8.9 \\ 9.0 \end{smallmatrix} \right.$ warm	
16	Fr.	General Lee invaded Pennsylvania, 1863. Tides $\left\{ \begin{smallmatrix} 8.4 \\ 9.0 \end{smallmatrix} \right.$ days.	
17	Sa.	$\delta \odot \zeta$. Tides $\left\{ \begin{smallmatrix} 8.0 \\ 9.0 \end{smallmatrix} \right.$	
18	A	1st S. after Trin. $\left\{ \begin{smallmatrix} 7.9 \\ 9.1 \end{smallmatrix} \right.$ Warm	
19	M.	First General Assembly in South Virginia, 1619. $\left\{ \begin{smallmatrix} 7.3 \\ 9.2 \end{smallmatrix} \right.$ and	
20	Tu.	Tides $\left\{ \begin{smallmatrix} 7.3 \\ 9.3 \end{smallmatrix} \right.$ showery.	
21	W.	ζ in Apo. \odot enters ∞ . SUMMER BEGINS. $\left\{ \begin{smallmatrix} 7.9 \\ 9.4 \end{smallmatrix} \right.$	
22	Th.	ζ runs high. Ψ in Peri. $\left\{ \begin{smallmatrix} 8.0 \\ 9.5 \end{smallmatrix} \right.$	
23	Fr.	Tides $\left\{ \begin{smallmatrix} 8.1 \\ 9.6 \end{smallmatrix} \right.$	
24	Sa.	St. John, Baptist. $\delta \Psi \zeta$. $\left\{ \begin{smallmatrix} 8.2 \\ 8.2 \end{smallmatrix} \right.$	
25	A	2d S. af. Trin. $\delta \Psi \zeta$. $\left\{ \begin{smallmatrix} 9.6 \\ 8.3 \end{smallmatrix} \right.$	
26	M.	American Railway Union Strike began, 1894. Tides $\left\{ \begin{smallmatrix} 9.6 \\ 8.4 \end{smallmatrix} \right.$	
27	Tu.	Tides $\left\{ \begin{smallmatrix} 9.5 \\ 8.5 \end{smallmatrix} \right.$ Weather more	
28	W.	$\delta \Psi \zeta$. Tides $\left\{ \begin{smallmatrix} 9.3 \\ 8.7 \end{smallmatrix} \right.$ comfortable,	
29	Th.	St. Peter & St. Paul. ζ on Eq. $\delta \Psi \zeta$. $\left\{ \begin{smallmatrix} 9.1 \\ 8.9 \end{smallmatrix} \right.$	
30	Fr.	Tides $\left\{ \begin{smallmatrix} 8.9 \\ 9.2 \end{smallmatrix} \right.$ [29 th . $\delta \delta \zeta$. rain.	

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JULY, SEVENTH MONTH.

ASTRONOMICAL CALCULATIONS.

☉'s Declination.	Days.	d.	m.	Days.	d.	m.	Days.	d.	m.	Days.	d.	m.	Days.	d.	m.
	1	23	N	7	7	22	36	13	21	50	19	20	51	25	19	40
2	23		3	8	22	29	14	21	41	20	20	40	26	19	27
3	22		58	9	22	22	15	21	32	21	20	29	27	19	13
4	22		53	10	22	15	16	21	23	22	20	17	28	19	00
5	22		49	11	22	7	17	21	13	23	20	5	29	18	46
6	22		42	12	21	59	18	21	2	24	20	53	30	18	31

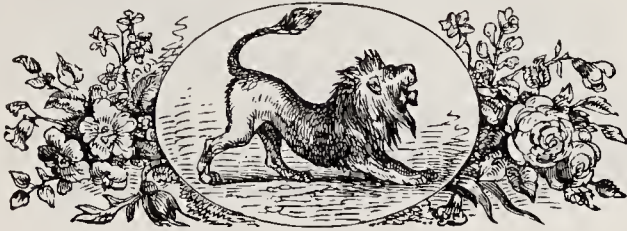
○ Full Moon, 7th day, 6h. 51m., morning, W.

☾ Last Quarter, 14th day, 7h. 24m., morning, W.

● New Moon, 22nd day, 11h. 3m., morning, E.

☽ First Quarter, 29th day, 11h. 44m., evening, W.

Day of Year.	Day of Month.	Day of the Week.	☉		Length of Days.		Day's Dec.		Sun Past.	Moon's Age.	Full Sea, Boston.		D's Place	☽		☽ Souths.
			Rises. h. m.	Sets. h. m.	h.	m.	h.	m.			Morn. h.	Even. h.		Sets. h. m.	h.		m.
182	1	Sa.	4 11	7 25	15 14	0 4	12 9	4 $\frac{3}{4}$	5 $\frac{1}{4}$	Lib	11 43	6 26				
183	2	S.	4 12	7 25	15 13	0 5	12 10	5 $\frac{3}{4}$	6 $\frac{1}{4}$	Sco	morn	7 18				
184	3	M.	4 13	7 24	15 11	0 7	12 11	6 $\frac{3}{4}$	7 $\frac{1}{4}$	Sco	0 11	8 15				
185	4	Tu.	4 13	7 24	15 11	0 7	12 12	7 $\frac{3}{4}$	8 $\frac{1}{4}$	Sgr	0 49	9 18				
186	5	W.	4 13	7 24	15 11	0 7	11 13	8 $\frac{3}{4}$	9	Sgr	1 37	10 24				
187	6	Th.	4 14	7 24	15 10	0 8	11 14	9 $\frac{3}{4}$	10	Cap	2 39	11 32				
188	7	Fr.	4 14	7 23	15 9	0 9	11 15	10 $\frac{3}{4}$	11	Cap	rises	morn				
189	8	Sa.	4 15	7 23	15 8	0 10	11 16	11 $\frac{3}{4}$	—	Aqr	8 41	0 36				
190	9	S.	4 16	7 23	15 7	0 11	11 17	0	0 $\frac{1}{2}$	Aqr	9 11	1 34				
191	10	M.	4 16	7 22	15 6	0 12	11 18	0 $\frac{3}{4}$	1 $\frac{1}{2}$	Psc	9 36	2 27				
192	11	Tu.	4 17	7 22	15 5	0 13	10 19	1 $\frac{3}{4}$	2 $\frac{1}{4}$	Psc	9 57	3 16				
193	12	W.	4 18	7 21	15 3	0 15	10 20	2 $\frac{1}{2}$	3 $\frac{1}{4}$	Psc	10 17	4 00				
194	13	Th.	4 19	7 21	15 2	0 16	10 21	3 $\frac{1}{2}$	4	Ari	10 37	4 44				
195	14	Fr.	4 19	7 20	15 1	0 17	10 22	4 $\frac{1}{4}$	4 $\frac{3}{4}$	Ari	10 59	5 27				
196	15	Sa.	4 20	7 19	14 59	0 19	10 23	5 $\frac{1}{4}$	5 $\frac{3}{4}$	Tau	11 24	6 10				
197	16	S.	4 21	7 19	14 58	0 20	10 24	6 $\frac{1}{4}$	6 $\frac{1}{2}$	Tau	11 53	6 55				
198	17	M.	4 22	7 18	14 56	0 22	10 25	7 $\frac{1}{4}$	7 $\frac{1}{2}$	G'm	morn	7 43				
199	18	Tu.	4 23	7 17	14 54	0 24	10 26	8	8 $\frac{1}{4}$	G'm	0 29	8 32				
200	19	W.	4 24	7 17	14 53	0 25	10 27	9	9	G'm	1 12	9 23				
201	20	Th.	4 24	7 16	14 52	0 26	10 28	9 $\frac{3}{4}$	9 $\frac{3}{4}$	Cnc	2 03	10 14				
202	21	Fr.	4 25	7 15	14 50	0 28	10 29	10 $\frac{1}{2}$	10 $\frac{1}{2}$	Cnc	3 02	11 05				
203	22	Sa.	4 26	7 14	14 48	0 30	9 9	11	11 $\frac{1}{4}$	Cnc	sets	11 54				
204	23	S.	4 27	7 13	14 46	0 32	9 1	11 $\frac{3}{4}$	11 $\frac{3}{4}$	Leo	8 00	0 42				
205	24	M.	4 28	7 12	14 44	0 34	9 2	—	0 $\frac{1}{4}$	Leo	8 22	1 27				
206	25	Tu.	4 29	7 11	14 42	0 36	9 3	0 $\frac{1}{2}$	1	Vir	8 43	2 10				
207	26	W.	4 30	7 10	14 40	0 38	9 4	1 $\frac{1}{4}$	1 $\frac{3}{4}$	Vir	9 03	2 53				
208	27	Th.	4 31	7 9	14 38	0 40	9 5	1 $\frac{3}{4}$	2 $\frac{1}{4}$	Lib	9 24	3 37				
209	28	Fr.	4 32	7 8	14 36	0 42	9 6	2 $\frac{1}{2}$	3	Lib	9 46	4 22				
210	29	Sa.	4 33	7 7	14 34	0 44	9 7	3 $\frac{1}{2}$	4	Lib	10 13	5 11				
211	30	S.	4 34	7 6	14 32	0 46	9 8	4 $\frac{1}{4}$	4 $\frac{3}{4}$	Sco	10 44	6 05				
212	31	M.	4 35	7 5	14 30	0 48	9 10	5 $\frac{1}{4}$	5 $\frac{3}{4}$	Sco	11 27	7 03				



The proud pomp of the midsummer is here;
 With daisy blooms the meadow lands are white;
 And over them the birds chant their delight,
 And the blue, listening heavens bend to hear.

MRS. LOUISE (CHANDLER) MOULTON

D.M.	D.W.	Aspects, Holidays, Heights of High Water, etc.	Farmer's Calendar.
1	Sa.	Battle of the Somme begins, 1916.	<p>Rabies.</p> <p>Since ancient times rabies has inflicted terrible suffering upon man and animals. Magicians, priests, and early physicians advocated absurd theories and treatments. Today speculation and disputation frequently afford a more dramatic appeal to the public than established facts and prudent judgment. In some communities, nothing short of a catastrophe seems to command a serious consideration of rabies.</p> <p>Most of the warm-blooded animals are susceptible to rabies. The cause, an ultra-microscopic virus, is in the saliva of rabid animals. Wounds associated with the bites of such animals or any wounds contaminated with their saliva become infected. Dogs, particularly those without declared owners, play a conspicuous part in spreading this almost uniformly fatal disease. More than forty years ago a method of preventive vaccination was discovered. Today reliable preventive methods are available.</p> <p>Law-abiding owners, their dogs, and the public as a whole are entitled to protection against this serious disease. The canine population should be controlled by effective registration. Seemingly irresponsible owners of dogs should be made aware of their civic obligations.</p>
2	A	3d S. af. T. ♀ Gr. Elong. ⊕ in E. ⊕ Aph. {8.6 in 8.8 9.8	
3	M.	Foundation of Quebec, 1608. {8.6 10.2 [2d. ♀ in ☽.	
4	Tu.	Independence Day. Tides {8.7 10.6	
5	W.	☾ runs low. Tides {8.9 11.0 Sultry and	
6	Th.	☾ in Per. {9.2 11.8 uncomfortable.	
7	Fr.	Annexation of Hawaii, 1898. Tides {9.4 11.4	
8	Sa.	Edmund Burke died. 1797. Tides {9.6	
9	A	4th S. af. T. ☽ h C. {11.4 9.7 Cool	
10	M.	Burning of London Bridge, 1212. Tides {11.1 9.7 for	
11	Tu.	John Quincy Adams born, 1767. Tides {10.6 9.7 the	
12	W.	☾ on Eq. ☽ ♀ ♀. {10.0 9.5 season.	
13	Th.	☽ in Aphelion. Tides {9.3 9.3	
14	Fr.	♀ Gr. Hel. ☽ ⊕ C. {8.7 9.0 Very	
15	Sa.	St. Swithin. ♀ Stat. {8.1 8.9 warm,	
16	A	5th S. af. Trin. {7.6 8.8 thunder	
17	M.	Secret treaty signed by the Central Powers and Bulgaria, 1915. {7.4 8.8	
18	Tu.	☾ in Apogee. {7.4 8.9 showers.	
19	W.	☾ runs high. Tides {7.4 9.0	
20	Th.	St. Margaret. ☽ ⊕ ☽. Tides {7.6 9.2	
21	Fr.	Last American note on the Lusitania, 1915. Tides {7.9 9.4	
22	Sa.	St. Mary Magdalene. Tides {8.2 9.6	
23	A	6th S. af. T. ☽ ♀ C. {8.4 9.7 More	
24	M.	☽ ♀ C. {8.7 comfortable.	
25	Tu.	St. James. ☽ ♀ C. Tides {8.9 9.2	
26	W.	St. Anne. ☾ on Eq. ☽ ♀ C. {9.7 9.2	
27	Th.	♂ in ☽. Tides {9.6 9.4	
28	Fr.	☽ ♂ C. Tides {9.3 9.5	
29	Sa.	Boston damaged by fire, 1856. Tides {9.0 9.7 Rain.	
30	A	7th S. af. T. ☽ ♀ ☽ Inf. {8.7 9.8	
31	M.	Tides {8.4 9.9	

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AUGUST, EIGHTH MONTH.

ASTRONOMICAL CALCULATIONS.

☉'s Declination.	Days.	d. m.	Days.	d. m.	Days.	d. m.	Days.	d. m.	Days.	d. m.
	1	18N.	2	7	16 26	13	14 41	19	12 47	25	10 46
2	17	46	8	16 9	14	14 22	20	12 27	26	10 25
3	17	31	9	15 52	15	14 4	21	12 7	27	10 4
4	17	15	10	15 34	16	13 45	22	11 47	28	9 43
5	16	59	11	15 17	17	13 26	23	11 27	29	9 22
6	16	42	12	14 59	18	13 6	24	11 6	30	9 00

○ Full Moon, 5th day, 2h. 32m., evening, E.

☾ Last Quarter, 12th day, 10h. 49m., evening, E.

● New Moon, 21st day, 0h. 48m., morning, E.

☽ First Quarter, 28th day, 5h. 13m., morning, W.

Day of Year.	Day of Month.	Day of the Week.	☉		Length of Days.		Day's Decr.		Sun. Fast Moon's Age.	Full Sea, Boston.		D's Place	D Sets.		D Souths. in.
			Rises. h. m.	Sets. h. m.	h.	m.	h.	m.		Morn. h.	Even. h.		h.	m.		h.	m.
213	1	Tu.	4 36	7 4	14 28	0 50	10 10	6½	6¾	6½	6¾	Sgr	morn	8 06	
214	2	W.	4 37	7 3	14 26	0 52	10 11	7½	7¾	7½	7¾	Sgr	0 21	9 12	
215	3	Th.	4 38	7 2	14 24	0 54	10 12	8½	8¾	8½	8¾	Cap	1 28	10 17	
216	4	Fr.	4 39	7 1	14 22	0 56	10 13	9½	9¾	9½	9¾	Cap	2 45	11 17	
217	5	Sa.	4 40	6 59	14 19	0 59	10	10½	10¾	10½	10¾	Aqr	rises	morn	
218	6	S.	4 41	6 58	14 17	1 1	10 15	11½	11¾	11½	11¾	Aqr	7 35	0 13	
219	7	M.	4 42	6 57	14 15	1 3	10 16	—	0¼	—	0¼	Psc	7 58	1 04	
220	8	Tu.	4 43	6 56	14 13	1 5	10 17	0½	1	0½	1	Psc	8 19	1 51	
221	9	W.	4 44	6 54	14 10	1 8	10 18	1¼	1¾	1¼	1¾	Ari	8 40	2 36	
222	10	Th.	4 45	6 53	14 8	1 10	11 19	2	2½	2	2½	Ari	9 02	3 20	
223	11	Fr.	4 46	6 51	14 5	1 13	11 20	3	3¼	3	3¼	Tau	9 25	4 04	
224	12	Sa.	4 47	6 50	14 3	1 15	11 21	3¾	4¼	3¾	4¼	Tau	9 53	4 50	
225	13	S.	4 49	6 49	14 0	1 18	11 22	4¾	5	4¾	5	Tau	10 27	5 37	
226	14	M.	4 50	6 47	13 57	1 21	11 23	5½	6	5½	6	G'm	11 07	6 26	
227	15	Tu.	4 51	6 46	13 55	1 23	11 24	6½	6¾	6½	6¾	G'm	11 55	7 16	
228	16	W.	4 52	6 44	13 52	1 26	12 25	7½	7¾	7½	7¾	Cnc	morn	8 08	
229	17	Th.	4 53	6 43	13 50	1 28	12 26	8½	8½	8½	8½	Cnc	0 51	8 59	
230	18	Fr.	4 54	6 41	13 47	1 31	12 27	9¼	9¼	9¼	9¼	Cnc	1 53	9 49	
231	19	Sa.	4 55	6 40	13 45	1 33	12 28	10	10	10	10	Leo	2 59	10 37	
232	20	S.	4 56	6 38	13 42	1 36	12 29	10½	10¾	10½	10¾	Leo	4 06	11 23	
233	21	M.	4 57	6 37	13 40	1 38	13	11¼	11½	11¼	11½	Vir	sets	0 08	
234	22	Tu.	4 58	6 35	13 37	1 41	13	11¾	—	11¾	—	Vir	7 09	0 52	
235	23	W.	4 59	6 34	13 35	1 43	13	2	0	0½	0½	Vir	7 30	1 36	
236	24	Th.	5 0	6 32	13 32	1 46	13	3	0¾	1	0¾	Lib	7 52	2 21	
237	25	Fr.	5 1	6 30	13 29	1 49	14	4	1½	1¾	1½	Lib	8 17	3 09	
238	26	Sa.	5 3	6 29	13 26	1 52	14	5	2¼	2½	2¼	Sco	8 46	4 01	
239	27	S.	5 4	6 27	13 23	1 55	14	6	3	3½	3	Sco	9 24	4 57	
240	28	M.	5 5	6 26	13 21	1 57	14	7	4	4¼	4¼	Sgr	10 13	5 57	
241	29	Tu.	5 6	6 24	13 18	2 00	15	8	5	5½	5½	Sgr	11 14	7 00	
242	30	W.	5 7	6 22	13 15	2 3	15	9	6¼	6½	6¼	Cap	morn	8 03	
243	31	Th.	5 8	6 21	13 13	2 5	15	10	7¼	7½	7¼	Cap	0 26	9 04	



Sing me a song of idle days
 When golden langour is on the ways,
 And far away, where the upland ends,
 Among red corn the reaper bends,
 And farther the faint line of the sea
 Lies blue, to mind us our land is free!
 Sing me a song of idle days
 When Love dreams in a golden haze.

FRANCIS WILLIAM BOURDILLON

D.M.	D.W.	Aspects, Holidays, Heights of High Water, etc.	Farmer's Calendar.
1	Tu.	Lammas Day. Tides { 8.3 / 10.1	Farmer's Rights Regarding Aviation The ability of the law to deal with new problems has again been demonstrated in the field of aviation. Since the dawn of our common (English) law the courts have jealously guarded the right of the landowner against trespassers. It has been held that a trespass may be committed by walking on the ground, by tunnelling under the ground or by invading the air space above the ground. This was on the principle that "he who owns the earth owns down to the center and up to the skies"—a sort of glorified cut of earthly and celestial pie. On this theory the following have been held trespassers—shooting a projectile over land, stringing a wire over land, building so that eaves projected over the adjoining land. The development of the airplane has raised a problem, for the strict application of the above-mentioned principle would make every inch of the plane's progress a trespass and make flying impossible. The ability of our law to retain the heart of the theory and still atone for the progress of civilization is shown by the uniform tendency of the courts to hold that flying at certain
2	W.	☾ runs ♀ Gr. Hel. ☽ Stat. { 8.4 / 10.4	
3	Th.	☾ in Peri. ♀ ♀ Ψ. { 8.7 / 10.7 <i>Southerly</i>	
4	Fr.	England declares war on Germany, 1914. { 9.1 / 11.0 <i>winds</i>	
5	Sa.	♁ ♁ ☾. ♁ ♁ ☉. { 9.5 / 11.2 <i>and warm.</i>	
6	A	St'h S. af. ☽. Transfiguration. { 9.8 / 11.1	
7	M.	D'iberville arriv'd at Penobscot, 1696. Capture of Ft. Wm. Henry resulted. { — / 10.0	
8	Tu.	☾ on Equator. Tides { 10.9 / 10.1	
9	W.	♀ Stationary. Tides { 10.4 / 9.9	
10	Th.	St. Laurence. { 9.8 / 9.9 <i>Refreshing</i>	
11	Fr.	♁ ☽ ☾. Tides { 9.1 / 9.4 <i>breezes.</i>	
12	Sa.	Albert Gallatin, American statesman, died, 1849. Tides { 8.5 / 9.1	
13	A	9th S. after Trinity. Tides { 7.8 / 8.7	
14	M.	Tides { 7.4 / 8.5	
15	Tu.	☾ runs high. ☾ in Ap. { 7.2 / 8.5	
16	W.	The Northern Sea discovered by Franklin, 1825. Tides { 7.2 / 8.6	
17	Th.	♁ ♀ ♃. ♀ Gr. Elong. W. Tides { 7.4 / 8.8	
18	Fr.	First English child born in America, at Roanoke, Va., 1587. Named Virginia { 7.7 / 9.1	
19	Sa.	♁ ♀ ☾. Tides { 8.1 / 9.4	
20	A	10th S. af. ☽. { 8.5 / 9.7 <i>Pronounced</i>	
21	M.	☉ Annular Eclipse, invisible in N. E. ♀ in ☉. { 8.9 / 9.8	
22	Tu.	♁ Ψ ☾. Tides { 9.8 / 9.9 <i>signs of</i>	
23	W.	☾ on Eq. ♁ ♃ ☾. ♁ ♀ ☾. { 9.9 / 9.7 <i>rain.</i>	
24	Th.	St. Bartholomew. Tides { 9.9 / 9.9	
25	Fr.	♁ ♂ ☾. Tides { 9.7 / 10.1	
26	Sa.	♀ in Per. Tides { 9.4 / 10.1 <i>Cooler</i>	
27	A	11th S. af. Trin. { 9.0 / 10.0 <i>weather.</i>	
28	M.	St. Augustine. Tides { 8.6 / 9.8	
29	Tu.	Beheading of St. John, Baptist. ☾ runs low. { 8.8 / 9.8	
30	W.	Second Battle of Bull Run, 1862. Tides { 8.2 / 9.8	
31	Th.	☾ in Perigee. Tides { 8.3 / 10.0	

(Continued on page 33)

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SEPTEMBER, NINTH MONTH.

ASTRONOMICAL CALCULATIONS.

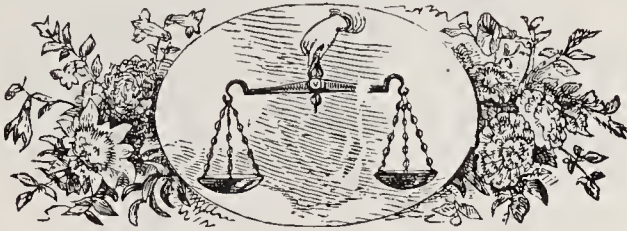
☉'s Declination.	Days.	d. m.	Days.	d. m.	Days.	d. m.	Days.	d. m.	Days.	d. m.
	1	8N.	17	7	6 04	13	3 48	19	1 29	25	0 52
2	7	55	8	5 42	14	3 25	20	1 05	26	1 15
3	7	33	9	5 19	15	3 01	21	0 42	27	1 38
4	7	11	10	4 56	16	2 38	22	0N.19	28	2 02
5	6	49	11	4 33	17	2 15	23	0S.05	29	2 25
6	6	26	12	4 11	18	1 52	24	0 28	30	2 49

- Full Moon, 4th day, 0h. 4m., morning, W.
 ☾ Last Quarter, 11th day, 4h. 30m., evening, W.
 ● New Moon, 19th day, 1h. 21m., evening, W.
 ☽ First Quarter, 26th day, 10h. 36m., morning, E.

Day of Year.	Day of Month.	Day of the Week.	☉		Length of Days.		Day's Decr.		Sun Past.	Moon's Age.	Full Sea, Boston.		D's Place	D Sets		D Souths.
			Rises.	Sets.	h.	m.	h.	m.			Morn.	Even.		h.	m.		h.	m.
244	1	Fr.	5 9	6 19	13 10	2 8	16 11	11	8¼	8¾	Aqr	1 44	10 00			
245	2	Sa.	5 10	6 17	13 7	2 11	16 12	12	9¼	9¾	Aqr	3 03	10 52			
246	3	S.	5 11	6 15	13 4	2 14	16 13	13	10¼	10½	Psc	4 20	11 41			
247	4	M.	5 12	6 14	13 2	2 16	17 0	11	11¼	11¼	Psc	rises	morn			
248	5	Tu.	5 13	6 12	12 59	2 19	17 15	15	11¾	—	Ari	6 42	0 27			
249	6	W.	5 14	6 10	12 56	2 22	17 16	16	0¼	0½	Ari	7 04	1 12			
250	7	Th.	5 15	6 9	12 54	2 24	18 17	17	1	1¼	Ari	7 26	1 56			
251	8	Fr.	5 16	6 7	12 51	2 27	18 18	18	1¾	2	Tau	7 53	2 42			
252	9	Sa.	5 17	6 5	12 48	2 30	18 19	19	2½	2¾	Tau	8 24	3 29			
253	10	S.	5 18	6 3	12 45	2 33	19 20	20	3¼	3½	G'm	9 02	4 18			
254	11	M.	5 19	6 2	12 43	2 35	19 21	21	4	4¼	G'm	9 47	5 08			
255	12	Tu.	5 20	6 0	12 40	2 38	19 22	22	5	5¼	G'm	10 40	5 59			
256	13	W.	5 21	5 58	12 37	2 41	20 23	23	6	6¼	Cnc	11 40	6 50			
257	14	Th.	5 23	5 56	12 33	2 45	20 24	24	6¾	7	Cnc	morn	7 41			
258	15	Fr.	5 24	5 55	12 31	2 47	21 25	25	7¾	8	Leo	0 43	8 29			
259	16	Sa.	5 25	5 53	12 28	2 50	21 26	26	8½	8¾	Leo	1 50	9 16			
260	17	S.	5 26	5 51	12 25	2 53	21 27	27	9¼	9½	Leo	2 58	10 02			
261	18	M.	5 27	5 49	12 22	2 56	22 28	28	10	10¼	Vir	4 06	10 46			
262	19	Tu.	5 28	5 48	12 20	2 58	22 ●	10½	11	11¼	Vir	sets	11 31			
263	20	W.	5 29	5 46	12 17	3 1	22 1	11¼	11¾	11¾	Lib	5 56	0 16			
264	21	Th.	5 30	5 44	12 14	3 4	23 2	—	0	0	Lib	6 21	1 05			
265	22	Fr.	5 31	5 42	12 11	3 7	23 3	0¼	0¾	0¾	Sco	6 49	1 56			
266	23	Sa.	5 32	5 40	12 8	3 10	23 4	1	1½	1½	Sco	7 25	2 52			
267	24	S.	5 33	5 39	12 6	3 12	24 5	2	2¼	2¼	Sgr	8 11	3 52			
268	25	M.	5 34	5 37	12 3	3 15	24 6	2¾	3	3	Sgr	9 07	4 54			
269	26	Tu.	5 35	5 35	12 0	3 18	24 7	3¾	4	4	Cap	10 15	5 56			
270	27	W.	5 36	5 33	11 57	3 21	25 8	4¾	5¼	5¼	Cap	11 30	6 57			
271	28	Th.	5 38	5 32	11 54	3 24	25 9	6	6¼	6¼	Aqr	morn	7 53			
272	29	Fr.	5 39	5 30	11 51	3 27	25 10	7	7½	7½	Aqr	0 47	8 45			
273	30	Sa.	5 40	5 28	11 48	3 30	26 11	8¼	8½	8½	Aqr	2 03	9 34			

SEPTEMBER hath 30 days.

[1933



The jay screams through the chestnut wood;
The crisped and yellow leaves around
Are hue and texture of my mood—
And these rough burrs my heirlooms on the ground.

HENRY D. THOREAU

D.M.	D.W.	Aspects, Holidays, Heights of High Water, etc.	Farmer's Calendar.
1	Fr.	♁ ♀ ☾. Tides { ^{8.7} / _{10.3}	<i>Cool</i>
2	Sa.	♁ ♀ ☉. Tides { ^{9.2} / _{10.6}	<i>nights</i>
3	A	12th S. af. Trin. Tides { ^{9.7} / _{10.7}	<i>and</i>
4	M.	☾ on Eq. { ^{10.0} / _{10.6}	<i>mornings.</i>
5	Tu.	♀ Gr. Hel. Lat. N. Tides { ^{10.2} / _—	
6	W.	Battle of the Marne begins, 1914. Tides { ^{10.4} / _{10.3}	
7	Th.	♁ ♀ ♀. ♁ ♂ ☾. { ^{10.0} / _{10.1}	<i>Clear</i>
8	Fr.	Nativ. of Vir. Mary. ♀ in ☿. { ^{9.5} / _{9.9}	
9	Sa.	Tides { ^{8.9} / _{9.5}	<i>and warm.</i>
10	A	13th S. after Trin. Tides { ^{8.3} / _{9.1}	
11	M.	♁ ♀ ☉ Superior. Tides { ^{8.8} / _{8.7}	
12	Tu.	☾ runs high. ☾ in Apogee. { ^{7.4} / _{8.5}	
13	W.	Battle on the Plains of Abraham, Que., 1759. Wolfe & Montcalm killed. { ^{7.2} / _{8.4}	
14	Th.	Aaron Burr died, 1836. Tides { ^{7.3} / _{8.5}	
15	Fr.	James Fennimore Cooper born, 1789. { ^{7.5} / _{8.7}	<i>Cool</i>
16	Sa.	Tides { ^{7.9} / _{9.1}	<i>nights,</i>
17	A	14th S. af. ☽. { ^{8.5} / _{9.4}	<i>pleasant</i>
18	M.	♁ ♀ ☾. Tides { ^{9.0} / _{9.6}	<i>days.</i>
19	Tu.	☾ on Eq. ♁ ♀ ♀. { ^{9.6} / _{9.9}	<i>Warmer</i>
20	W.	♁ ♀ ☾. ♁ ♀ ☾. { ^{10.0} / _{9.9}	<i>again.</i>
21	Th.	St. Matthew. Tides { ^{10.4} / _—	
22	Fr.	☾ ♀ ☾. Tides { ^{9.9} / _{10.6}	
23	Sa.	☉ enters ♎. AUTUMN BEGINS. ♁ ♂ ☾. { ^{9.7} / _{10.6}	
24	A	15th S. af. ☽. Tides { ^{9.4} / _{10.4}	<i>Cool</i>
25	M.	☾ runs low. ☾ in Peri. { ^{8.9} / _{10.2}	<i>spell,</i>
26	Tu.	Americans break Hindenburg line, 1918. { ^{8.5} / _{9.8}	<i>some</i>
27	W.	♁ ♀ ☉. Tides { ^{8.3} / _{9.6}	<i>frosts in</i>
28	Th.	♀ in ☿. Tides { ^{8.2} / _{9.5}	<i>low places.</i>
29	Fr.	St. Michael & All Angels. ♁ ♀ ☾. { ^{8.5} / _{9.6}	
30	Sa.	St. Jerome. Tides { ^{8.9} / _{9.8}	

Timely Hints for The Farmer's Wife

Why not put a hinge in the tread for the bottom step of the stairs to make a storage place for rubbers.

Much time can be saved in shelling peas for a big family by running them through the clothes wringer with rolls adjusted to just break the pod without mashing the pea.

A small paint brush added to the cleaning equipment will help in removing dust from corners where the broom does not go.

A cloth dampened with alcohol will clean dusty candles without taking off the luster.

When sewing with silk thread put it through the needle twice. That is, put it through and then circle back and go through again to keep the thread from slipping from the needle while sewing. This does not hinder in any way the fine use of needle and thread, but it does keep you from losing time in re-threading the needle.

Try serving sour cream of good flavor with cinnamon and sugar for a dessert. It can be called bonnydabber or fille-bunke and may be much liked.

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OCTOBER, TENTH MONTH.

ASTRONOMICAL CALCULATIONS.

☉'s Declination.	Days.		Days.		Days.		Days.		Days.	
	d.	m.	d.	m.	d.	m.	d.	m.	d.	m.
	1	38. 12	7	5 31	13	7 47	19	10 00	25	12 07
	2	3 35	8	5 54	14	8 10	20	10 21	26	12 28
	3	3 58	9	6 17	15	8 32	21	10 43	27	12 48
	4	4 22	10	6 39	16	8 54	22	11 04	28	13 08
	5	4 45	11	7 02	17	9 16	23	11 25	29	13 28
	6	5 08	12	7 25	18	9 38	24	11 46	30	13 48

○ Full Moon, 3rd day, 0h. 8m., evening, E.

☾ Last Quarter, 11th day, 11h. 46m., morning, W.

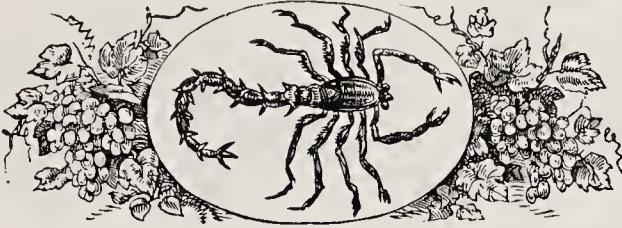
● New Moon, 19th day, 0h. 45m., morning, E.

☽ First Quarter, 25th day, 5h. 21m., evening, E.

Day of Year.	Day of Month.	Day of the Week.	☉		Length of Days.		Day's Decr.		Sun. Fast.	Moon's Age.	Full Sea, Boston.		D's Place.	☽		☽ Souths.
			Rises.	Sets.	h.	m.	h.	m.			Morn.	Even.		Sets	h.		m.
274	1	S.	5 41	5 26	11 45	3 33	26 12	9	9½	9	9½	Psc	3 15	10 20		
275	2	M.	5 42	5 25	11 43	3 35	26 13	9¾	10¼	9¾	10¼	Psc	4 27	11 04		
276	3	Tu.	5 43	5 23	11 40	3 38	27	○	10½	11	11	Ari	rises	11 49		
277	4	W.	5 44	5 21	11 37	3 41	27 15	11¼	11¾	11¼	11¾	Ari	5 29	morn		
278	5	Th.	5 45	5 19	11 34	3 44	27 16	—	0	0	0	Tau	5 54	0 34		
279	6	Fr.	5 46	5 17	11 31	3 47	28 17	0½	0¾	0½	0¾	Tau	6 23	1 21		
280	7	Sa.	5 47	5 16	11 29	3 49	28 18	1¼	1¼	1¼	1¼	G'm	6 58	2 09		
281	8	S.	5 48	5 14	11 26	3 52	28 19	2	2	2	2	G'm	7 41	2 59		
282	9	M.	5 50	5 13	11 23	3 55	28 20	2½	2¾	2½	2¾	G'm	8 30	3 50		
283	10	Tu.	5 51	5 11	11 20	3 58	29 21	3½	3½	3½	3½	Cnc	9 27	4 42		
284	11	W.	5 52	5 9	11 17	4 1	29 22	4¼	4½	4¼	4½	Cnc	10 29	5 32		
285	12	Th.	5 53	5 8	11 15	4 3	29 23	5¼	5½	5¼	5½	Cnc	11 33	6 21		
286	13	Fr.	5 54	5 6	11 12	4 6	29 24	6¼	6½	6¼	6½	Leo	morn	7 08		
287	14	Sa.	5 55	5 4	11 9	4 9	30 25	7	7¼	7	7¼	Leo	0 39	7 53		
288	15	S.	5 57	5 3	11 6	4 12	30 26	7¾	8¼	7¾	8¼	Vir	1 47	8 38		
289	16	M.	5 58	5 1	11 3	4 15	30 27	8½	9	8½	9	Vir	2 55	9 22		
290	17	Tu.	5 59	5 0	11 1	4 17	30 28	9¼	9¾	9¼	9¾	Lib	4 05	10 07		
291	18	W.	6 0	4 58	10 58	4 20	31 29	10	10½	10	10½	Lib	5 18	10 55		
292	19	Th.	6 1	4 57	10 56	4 22	31	●	10¾	11¼	10¾	11¼	Sco	sets	11 46	
293	20	Fr.	6 2	4 55	10 53	4 25	31	1	11½	—	—	Sco	5 23	0 42		
294	21	Sa.	6 4	4 54	10 50	4 28	31	2	0	0¼	0¼	Sgr	6 07	1 42		
295	22	S.	6 5	4 52	10 47	4 31	31	3	0¾	1	1	Sgr	7 01	2 45		
296	23	M.	6 6	4 51	10 45	4 33	31	4	1¼	2	2	Cap	8 07	3 50		
297	24	Tu.	6 7	4 49	10 42	4 36	31	5	2½	3	3	Cap	9 20	4 51		
298	25	W.	6 9	4 48	10 39	4 39	32	6	3½	4	4	Cap	10 37	5 49		
299	26	Th.	6 10	4 46	10 36	4 42	32	7	4¾	5	5	Aqr	11 53	6 42		
300	27	Fr.	6 11	4 45	10 34	4 44	32	8	5¾	6¼	6¼	Aqr	morn	7 31		
301	28	Sa.	6 12	4 43	10 31	4 47	32	9	6¾	7¼	7¼	Psc	1 05	8 17		
302	29	S.	6 13	4 42	10 29	4 49	32	10	7¾	8¼	8¼	Psc	2 15	9 01		
303	30	M.	6 14	4 41	10 27	4 51	32	11	8¾	9	9	Ari	3 23	9 44		
304	31	Tu.	6 16	4 40	10 24	4 54	32	12	9½	10	10	Ari	4 31	10 29		

OCTOBER hath 31 days.

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Far in a sheltered nook,
I've met, in these calm days, a smiling flower,
A lonely aster, trembling by a brook,
At noon's warm quiet hour.
And something told my mind
That should old age to childhood call me back,
Some sunny days and flowers I still might find
Along life's weary track.

JOHN HOWARD BRYANT.

D.M.	D.W.	Aspects, Holidays, Heights of High Water etc.	Farmer's Calendar.
1	A	16th S. af. T. { ^{9.4} / _{10.0} Variable	<p>Leafy Covering Keeps "Pores" of Soil Open.</p> <p>Leaves covering the ground not only hold a large amount of rainfall themselves, but they keep the "pores" of the soil open and allow it to absorb much more moisture than land not so covered, according to soil erosion specialists of the United States Department of Agriculture.</p> <p>In Oklahoma an experiment is in progress to discover how much water the leafy covering in wooded land holds. Measurements showed that the amount of water held on the land was much more than the leaves could hold. The investigators found that the leaves filter the water, keep it clear and let it soak into the soil through the many cracks and holes. Where there is no leafy covering to filter the water, silt fills these pores and more water then runs off the land, carrying eroded soil.</p> <p>Two wooded plots of equal size were observed. One was left in the natural state, the other had the leafy covering burned off with a blow torch. A special device measured the run-off of water and the wash-off of soil. In 2 years, 30 times as much water and 15 times as much soil were saved on the ground carpeted with forest leaves as on the burned-over land.</p>
2	M.	☾ on Eq. Tides { ^{9.9} / _{10.0} winds	
3	Tu.	George Bancroft, historian. born, 1800. { ^{10.1} / _{10.0} and	
4	W.	♄ ☽ ☾. Tides { ^{10.3} / _{9.8} weather.	
5	Th.	Jonathan Edwards born, 1703. Tides { [—] / _{10.3}	
6	Fr.	Germany & Austria address pleas for armistice to Pres. Wilson, 1918. { ^{9.5} / _{10.1}	
7	Sa.	Tides { ^{9.1} / _{9.8}	
8	A	17th S. af. T. Tides { ^{8.6} / _{9.5} Warm	
9	M.	St. Denis. ☾ Runs high. ☾ in Ap. { ^{8.2} / _{9.1}	
10	Tu.	Va. and Ohio Indians engage in battle, 1774. { ^{7.8} / _{8.7} ♀ in AP.	
11	W.	Columbus discovers the Bahama Islands, 1492. { ^{7.5} / _{8.5} and	
12	Th.	♀ in Aph. { ^{7.4} / _{8.4} moist with	
13	Fr.	Dirigible ZK-3 in flight from Ger. to U.S., 1924. { ^{7.6} / _{8.4} southerly	
14	Sa.	♄ ♀ ♃. ♃ Stat. { ^{7.9} / _{8.6} winds.	
15	A	18th S. af. Trin. ♄ ♀ ☾. { ^{8.3} / _{8.9}	
16	M.	☾ on Equator. Tides { ^{8.9} / _{9.2}	
17	Tu.	♄ ♃ ☾. Tides { ^{9.6} / _{9.5} Some	
18	W.	St. Luke. Tides { ^{10.1} / _{9.7} rain.	
19	Th.	♄ ☽ ☾. Tides { ^{10.6} / _{9.8}	
20	Fr.	♄ ♀ ☾. Tides { [—] / _—	
21	Sa.	☾ in Perigee. Tides { ^{9.8} / _{11.1} Mild	
22	A	19th S. af. Trin. ♄ ♃ ☾. { ^{9.6} / _{11.0}	
23	M.	☾ runs low. { ^{9.3} / _{10.7} [22d. ♄ ♀ ☾.	
24	Tu.	Peace of Westphalia, 1648. { ^{8.9} / _{10.3} for the	
25	W.	St. Crispin. Tides { ^{8.6} / _{9.8} season.	
26	Th.	♄ ♃ ☾. Tides { ^{8.5} / _{9.5}	
27	Fr.	Amer. troops first officially reported as occupying first line trenches, 1917. { ^{8.5} / _{9.2}	
28	Sa.	St. Simon & St. Jude. ☾ Gr. Elong. E. { ^{8.8} / _{9.2}	
29	A	20th S. af. T. ☾ on Gr. Hel. ☾ Lat. S. { ^{9.1} / _{9.2}	
30	M.	Republic proclaimed in Hungary, 1918. { ^{9.5} / _{9.2} Southerly	
31	Tu.	All Hallows Eve. { ^{9.8} / _{9.2} winds, rain.	

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NOVEMBER, ELEVENTH MONTH.

ASTRONOMICAL CALCULATIONS.

☉'s Declination.	Days.		d. m.		Days.		d. m.		Days.		d. m.	
	1	14s.	27	7	16 18	13	17 59	19	19 29	25	20 46	
2	14	46	8	16 35	14	18 15	20	19 43	26	20 58		
3	15	05	9	16 53	15	18 30	21	19 56	27	21 09		
4	15	24	10	17 10	16	18 45	22	20 09	28	21 19		
5	15	42	11	17 26	17	19 00	23	20 22	29	21 30		
6	16	00	12	17 43	18	19 15	24	20 34	30	21 40		

○ Full Moon, 2nd day, 2h. 59m., morning, W.

☾ Last Quarter, 10th day, 7h. 18m., morning, W.

● New Moon, 17th day, 11h. 24m., morning, E.

☽ First Quarter, 24th day, 2h. 38m., morning, W.

Day of Year.	Day of Month.	Day of the Week.	☉		Length of Days.		Day's Decr.		Sun. Fast.	Moon's Age.	Full Sea, Boston.		☽'s Place	☽ Sets.		☽ Souths.
			Rises.	Sets.	h.	m.	h.	m.			h.	m.		Morn.	Even		h.	m.	h.	m.
305	1	W.	6 17	4 38	10 21	4 57	32 13	10 1/4	10 3/4	Tau	5 38	11 14				
306	2	Th.	6 18	4 37	10 19	4 59	32 0	10 3/4	11 1/4	Tau	rises	morn				
307	3	Fr.	6 20	4 36	10 16	5 2	32 15	11 1/2	—	Tau	4 57	0 02				
308	4	Sa.	6 21	4 34	10 13	5 5	32 16	0	0 1/4	G'm	5 36	0 52				
309	5	S.	6 22	4 33	10 11	5 7	32 17	0 3/4	0 3/4	G'm	6 23	1 42				
310	6	M.	6 23	4 32	10 9	5 9	32 18	1 1/2	1 1/2	Cnc	7 18	2 34				
311	7	Tu.	6 25	4 31	10 6	5 12	32 19	2 1/4	2 1/4	Cnc	8 18	3 25				
312	8	W.	6 26	4 30	10 4	5 14	32 20	3	3	Cnc	9 21	4 14				
313	9	Th.	6 27	4 29	10 2	5 16	32 21	3 3/4	4	Leo	10 24	5 01				
314	10	Fr.	6 28	4 27	9 59	5 19	32 22	4 1/2	4 3/4	Leo	11 30	5 46				
315	11	Sa.	6 30	4 26	9 56	5 22	32 23	5 1/2	5 3/4	Vir	morn	6 30				
316	12	S.	6 31	4 25	9 54	5 24	32 24	6 1/4	6 1/2	Vir	0 36	7 13				
317	13	M.	6 32	4 25	9 53	5 25	31 25	7	7 1/2	Vir	1 44	7 56				
318	14	Tu.	6 33	4 24	9 51	5 27	31 26	8	8 1/4	Lib	2 53	8 42				
319	15	W.	6 35	4 23	9 48	5 30	31 27	8 3/4	9 1/4	Lib	4 06	9 31				
320	16	Th.	6 36	4 22	9 46	5 32	31 28	9 1/2	10	Sco	5 24	10 25				
321	17	Fr.	6 37	4 21	9 44	5 34	31 ●	10 1/4	10 3/4	Sco	sets	11 24				
322	18	Sa.	6 38	4 20	9 42	5 36	31 1	11	11 3/4	Sgr	4 47	0 28				
323	19	S.	6 40	4 19	9 39	5 39	30 2	—	0	Sgr	5 51	1 34				
324	20	M.	6 41	4 19	9 38	5 40	30 3	0 1/2	0 3/4	Cap	7 06	2 40				
325	21	Tu.	6 42	4 18	9 36	5 42	30 4	1 1/2	1 3/4	Cap	8 25	3 42				
326	22	W.	6 43	4 17	9 34	5 44	30 5	2 1/2	2 3/4	Aqr	9 42	4 38				
327	23	Th.	6 45	4 17	9 32	5 46	29 6	3 1/2	3 3/4	Aqr	10 56	5 29				
328	24	Fr.	6 46	4 16	9 30	5 48	29 7	4 1/2	4 3/4	Psc	morn	6 16				
329	25	Sa.	6 47	4 15	9 28	5 50	29 8	5 1/2	5 3/4	Psc	0 08	7 00				
330	26	S.	6 48	4 15	9 27	5 51	28 9	6 1/2	6 3/4	Ari	1 15	7 43				
331	27	M.	6 49	4 14	9 25	5 53	28 10	7 1/2	7 3/4	Ari	2 22	8 27				
332	28	Tu.	6 50	4 14	9 24	5 54	28 11	8 1/4	8 3/4	Ari	3 29	9 11				
333	29	W.	6 51	4 14	9 23	5 55	27 12	9	9 1/2	Tau	4 35	9 58				
334	30	Th.	6 53	4 13	9 20	5 58	27 13	9 3/4	10 1/4	Tau	5 41	10 46				



How soft and still the autumnal landscape lies,
 Calmly outspread beneath the smiling skies;
 As if the earth, in prodigal array
 Of gems and broidered robes kept holiday;
 Her harvest yielded and her work all done,
 Basking in beauty 'neath the autumn sun!

SARAH HELEN WHITMAN

D. M.	D. W.	Aspects, Holidays, Heights of High Water, etc.	Farmer's Calendar.
1	W.	All Saints Day. $\delta \odot \subset$. Tides $\left\{ \begin{matrix} 10.0 \\ 9.2 \end{matrix} \right.$	<p>Care of Farm Tools.</p> <p>If a farmer has a horse or a cow or some other animal of which he does not take reasonable care, the "Society with the long name" will soon get after him. Nobody, however, enters a complaint when the farm tools are not properly cared for. Neglect of both animals and tools on many farms is the source of some mighty big leaks in the farmer's profit.</p> <p>The mowing machine, the corn harvester, and the potato digger have now finished their work for the season. Have you cleaned them up and made a note of any broken or worn parts before storing away? Have the sections of the mower knife and the knotter of the corn harvester been greased to prevent rusting? Is the hay rake still out under the apple tree? Have you cleaned and greased the gears on the fertilizer sower and in the hopper of the corn planter? Fertilizer will cause iron to rust very quickly and rapidly. Have the plows and disc harrows been cleaned and oiled? When a plow is laid by even for a few weeks its polished surfaces should be cleaned, wiped dry and given a coat of oil. Old crank case oil from the auto is mighty good stuff for this purpose.</p>
2	Th.	$\square \text{h} \odot$. Tides $\left\{ \begin{matrix} 10.1 \\ 9.0 \end{matrix} \right.$ High	
3	Fr.	Gr. Hel. Tides $\left\{ \begin{matrix} 10.0 \\ 9.0 \end{matrix} \right.$ winds and	
4	Sa.	Cleveland elected, Blaine defeated, 1884. $\left\{ \begin{matrix} 8.8 \\ 9.9 \end{matrix} \right.$ rain.	
5	A	21st S. af. Trin. \subset runs high, $\left\{ \begin{matrix} 8.6 \\ 9.7 \end{matrix} \right.$	
6	M.	\subset in Apogee. $\left\{ \begin{matrix} 8.4 \\ 9.4 \end{matrix} \right.$ Colder.	
7	Tu.	Battle of Tippecanoe, 1811. Tides $\left\{ \begin{matrix} 8.1 \\ 9.1 \end{matrix} \right.$ A	
8	W.	Stationary. Tides $\left\{ \begin{matrix} 7.9 \\ 8.9 \end{matrix} \right.$ few	
9	Th.	Henry Cabot Lodge died, 1924. Tides $\left\{ \begin{matrix} 7.8 \\ 8.6 \end{matrix} \right.$ mild	
10	Fr.	Tides $\left\{ \begin{matrix} 7.8 \\ 8.6 \end{matrix} \right.$ days.	
11	Sa.	St. Martin. Tides $\left\{ \begin{matrix} 8.0 \\ 8.4 \end{matrix} \right.$	
12	A	22d S. af. Trin. $\delta \Psi \subset$. $\left\{ \begin{matrix} 8.8 \\ 8.5 \end{matrix} \right.$	
13	M.	\subset on Equator. $\left\{ \begin{matrix} 8.8 \\ 8.7 \end{matrix} \right.$ Colder,	
14	Tu.	$\delta \text{V} \subset$. Tides $\left\{ \begin{matrix} 9.8 \\ 9.0 \end{matrix} \right.$ some moist	
15	W.	First meeting of League of Nations, 1920. $\left\{ \begin{matrix} 9.9 \\ 9.2 \end{matrix} \right.$ days	
16	Th.	Tides $\left\{ \begin{matrix} 10.5 \\ 9.4 \end{matrix} \right.$ about this	
17	Fr.	$\text{in } \text{Q.}$ $\delta \text{V} \subset$. $\left\{ \begin{matrix} 11.0 \\ 9.5 \end{matrix} \right.$ time.	
18	Sa.	\subset in Per. $\delta \text{V} \odot$ Inf. $\left\{ \begin{matrix} 11.2 \\ 9.5 \end{matrix} \right.$	
19	A	23d S. af. Trin. \subset runs low. $\delta \text{V} \subset$. $\left\{ \begin{matrix} 11.3 \\ 9.4 \end{matrix} \right.$	
20	M.	$\delta \text{V} \subset$. Tides $\left\{ \begin{matrix} 9.4 \\ 11.2 \end{matrix} \right.$	
21	Tu.	in Perihelion. Tides $\left\{ \begin{matrix} 9.3 \\ 10.8 \end{matrix} \right.$	
22	W.	St. Cecilia. $\delta \text{h} \subset$. Tides $\left\{ \begin{matrix} 9.0 \\ 10.3 \end{matrix} \right.$	
23	Th.	Tides $\left\{ \begin{matrix} 8.9 \\ 9.8 \end{matrix} \right.$	
24	Fr.	Battle of Lookout Mountain, 1868. $\left\{ \begin{matrix} 8.8 \\ 9.3 \end{matrix} \right.$ Cold winds.	
25	Sa.	St. Catharine. \subset on Eq. Gr. Elong. $\left\{ \begin{matrix} 8.8 \\ 8.9 \end{matrix} \right.$	
26	A	24th S. af. Trin. Tides $\left\{ \begin{matrix} 9.0 \\ 8.6 \end{matrix} \right.$	
27	M.	Gen. Washington goes into winter quarters at Middlebrook, 1778. $\left\{ \begin{matrix} 9.2 \\ 8.5 \end{matrix} \right.$	
28	Tu.	Stationary. $\delta \odot \subset$. $\left\{ \begin{matrix} 9.3 \\ 8.4 \end{matrix} \right.$	
29	W.	Wendell Phillips born, 1811. Tides $\left\{ \begin{matrix} 9.5 \\ 8.3 \end{matrix} \right.$ Milder.	
30	Th.	St. Andrew. Thanksgiving Day. $\left\{ \begin{matrix} 9.6 \\ 8.3 \end{matrix} \right.$	

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DECEMBER, TWELFTH MONTH.

ASTRONOMICAL CALCULATIONS.

☉'s Declination.	Days.		Days.		Days.		Days.		Days.	
	d.	m.	d.	m.	d.	m.	d.	m.	d.	m.
	1	21s. 49	7	22 37	13	23 10	19	23 25	25	23 24
	2	21 58	8	22 44	14	12 14	20	23 26	26	23 22
	3	22 07	9	22 50	15	23 17	21	23 27	27	23 20
	4	22 15	10	22 56	16	23 20	22	23 27	28	23 17
	5	22 23	11	23 01	17	23 22	23	23 27	29	23 14
	6	22 30	12	23 05	18	23 24	24	23 26	30	23 10

○ Full Moon, 1st day, 8h. 31m., evening, E.

☾ Last Quarter, 10th day, 1h. 24m., morning, E.

● New Moon, 16th day, 9h. 53m., evening, W.

☽ First Quarter, 23rd day, 3h. 9m., evening, E.

○ Full Moon, 31st day, 3h. 54m., evening, E.

Day of Year.	Day of Month.	Day of the Week.	☉		Length of Days.	Day's Decr.	Sun. Fast.	Moon's Age.	Full Sea, Boston.		D's Place	☽		☽ Souths.
			Rises.	Sets.					Morn.	Even.		Sets.	h. m.	
335	1	Fr.	6 55	4 13	9 18 6	0 27	○	10½	11	G'm	6 44	11 37		
336	2	Sa.	6 55	4 12	9 17 6	1 26	15	11	11¾	G'm	rises	morn		
337	3	S.	6 56	4 12	9 16 6	2 26	16	11¾	—	G'm	5 10	0 28		
338	4	M.	6 57	4 12	9 15 6	3 25	17	0¼	0½	Cnc	6 08	1 19		
339	5	Tu.	6 59	4 12	9 13 6	5 25	18	1	1	Cnc	7 11	2 09		
340	6	W.	6 59	4 12	9 13 6	5 25	19	1¾	1¾	Leo	8 15	2 56		
341	7	Th.	7 04	4 12	9 12 6	6 24	20	2½	2½	Leo	9 19	3 42		
342	8	Fr.	7 04	4 12	9 12 6	6 24	21	3¼	3¼	Leo	10 23	4 25		
343	9	Sa.	7 14	4 12	9 11 6	7 23	22	4	4¼	Vir	11 27	5 07		
344	10	S.	7 24	4 12	9 10 6	8 23	23	4¾	5	Vir	morn	5 49		
345	11	M.	7 34	4 12	9 9 6	9 22	24	5½	6	Lib	0 33	6 32		
346	12	Tu.	7 44	4 12	9 8 6	10 22	25	6½	6¾	Lib	1 43	7 18		
347	13	W.	7 54	4 12	9 7 6	11 21	26	7¼	7¾	Sco	2 56	8 08		
348	14	Th.	7 64	4 12	9 6 6	12 21	27	8	8¾	Sco	4 14	9 03		
349	15	Fr.	7 64	4 12	9 6 6	12 21	28	9	9½	Sgr	5 34	10 04		
350	16	Sa.	7 74	4 13	9 6 6	12 20	●	9¾	10½	Sgr	sets	11 10		
351	17	S.	7 84	4 13	9 5 6	13 20	1	10¾	11½	Cap	4 39	0 18		
352	18	M.	7 84	4 13	9 5 6	13 19	2	11¾	—	Cap	5 59	1 24		
353	19	Tu.	7 94	4 14	9 5 6	13 19	3	0¼	0½	Aqr	7 21	2 25		
354	20	W.	7 104	4 14	9 4 6	14 18	4	1¼	1½	Aqr	8 40	3 20		
355	21	Th.	7 104	4 14	9 4	Inc.	18 5	2¼	2½	Psc	9 55	4 10		
356	22	Fr.	7 114	4 15	9 4 0	0 17	6 3	3	3½	Psc	11 07	4 57		
357	23	Sa.	7 114	4 16	9 5 0	1 17	7 4	4	4½	Psc	morn	5 41		
358	24	S.	7 114	4 16	9 5 0	1 16	8 5	5	5½	Ari	0 14	6 25		
359	25	M.	7 124	4 17	9 5 0	1 16	9 6	6	6½	Ari	1 21	7 10		
360	26	Tu.	7 124	4 17	9 5 0	1 15	10 6¾	7½	7½	Tau	2 27	7 55		
361	27	W.	7 134	4 18	9 5 0	1 15	11 7¾	8¼	8¼	Tau	3 34	8 43		
362	28	Th.	7 134	4 19	9 6 0	2 14	12 8½	9¼	9¼	G'm	4 37	9 32		
363	29	Fr.	7 134	4 20	9 7 0	3 14	13 9¼	10	10	G'm	5 38	10 23		
364	30	Sa.	7 134	4 20	9 7 0	3 13	14 10	10½	10½	G'm	6 34	11 15		
365	31	S.	7 144	4 21	9 7 0	3 13	○	10¾	11¼	Cnc	rises	morn		

REMARKABLE ASTEROIDS OF 1932.

THE OLD FARMER'S ALMANAC for 1930 contains a discussion of the little asteroid Eros, which of all heavenly bodies known at that time comes closer to the Earth (within 13,840,000 miles) than any other except the Moon. Eros had held this distinction ever since its discovery in 1898, but lost it in 1932 when two more asteroids were found which come even nearer.

The first of these was detected on March 12 by the Belgian astronomer Delporte, when it appeared like a thirteenth-magnitude star in the constellation Virgo, then almost opposite the Sun. It had an apparent eastward motion among the stars of more than a degree a day, whereas an ordinary asteroid in that position would have seemed to move westward due to the Earth's more rapid orbital revolution. This circumstance immediately aroused great interest among certain astronomers, who soon determined the form, size, and position of the orbit. They found that the object passed its perihelion on April 4 at a distance of 101,000,000 miles from the Sun and only about 7,000,000 miles outside the Earth's orbit; that the aphelion distance is 2.6 times greater; that the orbit lies in a plane inclined 12° to the plane of the ecliptic; and that the period of revolution is 2.7 years.

The second asteroid referred to, which was discovered by Reinmuth in Germany on April 24 very nearly opposite the Sun, has an even more remarkable orbit. Its perihelion, which it passed on July 7, lies inside the orbit of Venus, 60,000,000 miles from the Sun, while its aphelion is 3.5 times farther away, well outside the orbit of Mars. The orbit of the asteroid thus crosses those of three planets (Venus, the Earth, and Mars), in which respect it is unique. The orbit plane is inclined 6° to the plane of the ecliptic. The period of revolution is 1.8 years, the shortest asteroid period known. At its nearest approach to the Earth, Reinmuth's asteroid is only about 6,000,000 miles away—less than the minimum distance of Delporte's asteroid and less than half that of Eros.

Both of these new asteroids are tiny—not over a mile or two in diameter, while Eros is about fifteen. Their orbits resemble those of many comets more than those of most asteroids, and in fact their nature was at first so much in doubt that they were referred to cautiously as "objects"—Delporte's object and Reinmuth's object; but as they showed no tails or other cometary characteristics even when nearest the Earth and so most favorably seen, they are now definitely classed as asteroids.

A third remarkable asteroid was found by Van Biesbroeck at the Yerkes Observatory on July 30. It is noteworthy for its period of 2.0 years, which, with the exception of the periods of Eros and Reinmuth's object, is the shortest known.

THE LEONID METEORS.

Leonid meteors in large numbers were observed in 1931, from November 13 to 18. The maximum occurred on the morning of November 17, when in localities near the Atlantic coast of North America the meteors were seen to flash at rates as high as four meteors per minute. Many were brighter than the planet Jupiter and left behind them luminous trains which were visible, in some cases, for several minutes. It is likely that a brighter display will occur about November 16 or 17 in 1932, and another about the same dates in 1933. For further details concerning these and other meteors, consult THE OLD FARMER'S ALMANAC for 1932.

PERIHELION AND APHELION.

Perihelion is the term applied to that point of an orbit which is nearest the Sun; aphelion, to the point which is most remote. In the orbits of comets, the aphelion distance is several times the perihelion distance or, in the case of parabolic orbits, the aphelion distance is infinite; but in the principal planetary orbits, which are nearly circular, the difference of the perihelion and aphelion distances is a small fraction of either. For example, the Earth is only about 3,000,000 miles nearer the Sun at perihelion than at aphelion—a trivial matter compared with its average distance of 92,900,000 miles.

To some, it is a matter of surprise that we have our coldest weather in January, when the Earth is near perihelion and 3,000,000 miles nearer the Sun than in July. These forget that our winter is only a local affair and that, in January, the southern hemisphere is having its hottest weather so that the temperature of the Earth as a whole is not very different in January and in July. The average temperature of the entire surface of the Earth is, in fact, a little higher in January than in July, due to the 3% difference of distance.

There are two principal causes of the changes of season, either of which has a much greater effect on the temperature in any locality than has the change of the Earth's distance from the Sun from perihelion to aphelion. First, because the Sun in midwinter "runs lower" by about 47° than in midsummer, its rays fall much more slantingly upon the surface of the northern hemisphere in January than in July, so that in the former month the heat of a sunbeam is spread over a much greater area. It may be shown mathematically, for instance, that at noon on June 21, when the Sun "runs highest," a level area in New England receives heat from the Sun at more than twice the rate at which it receives heat at noon on December 22, when the Sun "runs lowest." Second, summer days in our latitude are several hours longer than winter days, so that in summer we receive heat for a longer time than in winter.

THE MOON'S DISTANCE.

The Moon's distance from the Earth ranges from a minimum of 221,463 miles to a maximum of 252,710 miles. Its average distance is 238,857 miles, or 60.27 times the Earth's equatorial radius. This average distance is not the average of the maximum and minimum distances, as may be easily seen, but is the average of all the Moon's distances from the Earth during an entire revolution.

Perigee and apogee are the terms applied to the points of the Moon's orbit which are nearest to and farthest from the Earth, respectively. The perigee and apogee distances are nearly equal to the minimum and maximum distances given above; but are not always exactly equal to them because of perturbations which vary the size and shape of the Moon's orbit.

RECENT COMETS.

During the year which ended June 30, 1932, six new comets were discovered, and three periodic comets which had been discovered in previous years were detected as they returned to the vicinity of the Earth. Only one of these comets (Ryves's) was seen without optical aid, and it could be so observed only with difficulty. The nine comets of the year were as follows:

1. Comet 1931 b, discovered 1931 July 16 by Masuji Nagata, a Japanese fruit grower and amateur astronomer, near Brawley, California. It had passed perihelion on June 11, about five weeks

earlier, and if discovered at that time it would probably have been seen with the naked eye; but at the time of its actual discovery it was telescopic, being of about the seventh magnitude. It was of a yellow color and had a short tail. It became steadily fainter until October 6, when it suddenly brightened about a hundred fold; then it grew rapidly fainter and was lost, even to the largest telescopes, before the end of 1931. At perihelion it was 97,000,000 miles from the Sun. Its orbit is elliptic, with the long period of 267 years, and lies in a plane inclined 42° to the plane of the ecliptic. There is a possibility that this comet is identical with bright comets which are recorded as having been seen in the years 574 and 1092 A.D.

2. Comet 1931 *c*, discovered by the English amateur astronomer, Ryves at Zaragoza, Spain, 1931, August 10. This comet was faintly visible to the unaided eye and had a tail about a degree long, but remained so nearly in the direction of the Sun that observations of it were difficult. Orbit parabolic, inclined 10° to the plane of the ecliptic. Motion retrograde. Perihelion passage, 1931, August 25, at a distance of 7,000,000 miles from the Sun—the smallest perihelion distance of any comet that has appeared during the last forty years.

3. Neujmin's comet of 1913, detected by Nicholson with the 100-inch telescope of the Mount Wilson Observatory in California, 1931, August 20. Fifteenth magnitude, no tail. Orbit elliptic, period 18 years, inclination 15° . Perihelion passage, 1931, April 30, at a distance of 142,000,000 miles from the Sun.

4. Comet 1932 *b*, a ninth-magnitude comet discovered near the south celestial pole 1932, April 2, by two observers independently—Houghton at Capetown and Ensor at Pretoria, South Africa. Orbit parabolic, inclined 75° to the plane of the ecliptic. Perihelion passage 1932, February 29, at 116,000,000 miles from the Sun.

5. Comet 1932 *c*, discovered by Carrasco at Madrid, 1932, April 22. It then showed a tiny tail and was of the twelfth magnitude, but it rapidly became fainter and was lost to observation within a few weeks. Orbit parabolic; inclination 58° ; perihelion passage 1931, November 30, at 218,000,00 miles from the Sun.

6. The Grigg-Skjellerup comet, detected by van Biesbroeck at the Yerkes Observatory, Wisconsin, 1932, April 28. Originally discovered by Grigg in 1902, but lost, and rediscovered by Skjellerup in 1922. The orbit is elliptic, and with the exception of that of Encke's comet the period (5.1 years) is the shortest known. Inclination of orbit plane to the ecliptic, 17° . Perihelion passage 1932, May 12, at a distance of 84,000,000 miles from the Sun. The comet was of the sixteenth magnitude and had no tail.

7. Kopff's periodic comet, originally discovered in 1902, detected by Bobone at Cordoba, Argentina, 1932, May 25. Though better situated than at its last previous return in 1926, the comet was still very small and faint. Perihelion passage 1932, August 21, at 158,000,000 miles from the Sun; inclination of orbit 9° ; period 6.6 years.

8. Comet 1932 *f*, discovered by Newman at the Lowell Observatory, Flagstaff, Arizona, 1932, June 1. The comet was of the twelfth magnitude and had a tiny tail. Orbit parabolic; inclination 78° ; perihelion passage 1932, September 24, at 153,000,000 miles from the Sun.

9. Comet 1932 *g*, discovered by Geddes at Melbourne, Australia, 1932, June 22, when it was of the tenth magnitude and growing fainter. Orbit parabolic, motion retrograde, inclination 58° ; perihelion passage 1932, October 26, at 178,000,000 miles from the Sun.

THE TOTAL SOLAR ECLIPSE OF 1932.

The total solar eclipse of August 31, 1932, the last which will be seen in New England in many years, was enjoyed by thousands of spectators stationed, principally, along the Maine coast. Observers farther inland were largely disappointed by cloudy weather, although at many localities some were favored by patches of clear sky. Parties of astronomers from many observatories in America, Europe, and Japan were distributed along the path of the Moon's shadow from Maine to northern Canada, but most of these were prevented by clouds from getting any observations. The finest view of the spectacle was undoubtedly that obtained by several observers who ascended in aeroplanes into the clear air at heights of 15,000 feet and more, and who reported seeing the Moon's shadow sweeping at amazing speed over the white clouds beneath.

The corona at this eclipse was of a form intermediate between that usually seen at eclipses which occur near sun-spot maximum and that at sun-spot minimum; from its brightest part, which formed a symmetrical ring around the Sun, there were faint extensions, the most conspicuous being a pennant-shaped streamer extending north-eastward from the Sun's equatorial zone to a length of more than three million miles. There were many of the famous red "prominences" which were conspicuous in the telescopic view, and some were so large as to be seen by a number of observers with the unaided eye.

The eclipse was not quite "on time"; the last Baily's bead vanished about five seconds after the time of "second contact" computed some years previously at the American Nautical Almanac office.

FARMER'S RIGHTS REGARDING AVIATION.

(Continued from page 21)

heights is not a trespass against the landowner. No definite height has been fixed by the courts, the test being that the airplane must stay above a level to which the landowner could use the space for reasonable purposes. Under this, flying in a city must, in order to avoid trespass, be higher than in the country. When an airplane collides with the Empire State Building the theory will indeed be tested.

JOSEPH J. HURLEY,

Professor, Boston College Law School
Legal Advisor, Old Farmer's Almanac

RABBIT PROMOTIONS — A WARNING!

We gladly publish the following by request:

"Do not let the readers of your historic and revered OLD FARMERS ALMANAC invest their hard-earned savings in some of these Rabbit Promotion schemes that are springing up all over the country, putting out all sorts of alluring figures, without a thorough and searching investigation.

We shall be glad to send any OLD FARMERS ALMANAC subscriber, without charge, a copy of our leaflet, 'Rabbit Promotions'—a warning to the public about the pitfalls in popular 'Get Rich Quick' schemes."

BOSTON BETTER BUSINESS BUREAU,

80 Summer Street, Boston, Mass.

TO PATRONS AND CORRESPONDENTS.

(Continued from page 2)

We are proud of our advertising section, representing as it does the leaders in American business life. THE OLD FARMER'S ALMANAC exercises a more rigid censorship of its advertising pages than any other American publication, accepting no medical, no questionable, no cheap advertising and no advertising in any way competing with the merchants of our local stores throughout New England.

GETTING MORE FERTILIZER FOR YOUR MONEY

While the title of this article is "Getting More Fertilizer for Your Money", it could just as well be "Getting Better Fertilizer for Your Money", for that is just what we farmers are doing today.

Since the war, some notable advances have been made in both the science and the art of fertilizer manufacture. Several marked tendencies have been manifest. One of these has been to devise and use higher grade materials and thus make it possible to produce the so-called "concentrated" or double-strength fertilizers; another has been to decrease the number of different brands or grades of fertilizers offered for sale; a third has been to eliminate the low-grade fertilizers, or those with only 15 or less units of plant food per ton, on which the farmer paid freight on a considerable quantity of worthless material; and a fourth, to lower the price of fertilizer and plant food elements to the farmer.

By means of new methods and processes which our fertilizer chemists have recently devised, we are now able to secure materials which contain two to three times the amount of nitrogen and phosphoric acid of those formerly used, and with these new materials our fertilizer men are fabricating the high-grade, concentrated mixtures which are proving both popular and economical.

For example, an 8-16-16 fertilizer could be purchased last spring in Boston for \$49.20 per ton; a 4-8-8, containing just half as much plant food, cost \$27.60 per ton, or \$55.20 for two tons. The farmer can secure the same amount of plant food in one ton of the 8-16-16 as he can in two tons of the 4-8-8, and will thus save \$6.00 in the cost of materials. Besides this, there will be a saving in freight on one ton of fertilizer, which usually amounts to about \$3.00, or a total saving of \$9.00 on the equivalent of two tons of fertilizer. Of course the farmer should apply only half as much per acre of the high-grade fertilizer because it is twice as strong as the 4-8-8.

Another most commendable thing that our fertilizer companies are doing is to decrease the number of different kinds and grades of fertilizer they are selling. For a long time there were so many different grades on the market that the farmer was confused as to just what grade would best suit his particular needs. It was a little like trying to select a couple of Christmas neckties from a big assortment. Now we have a relatively small number of standard grades from which to make our selection, which avoids confusion on our part and serves as an economy for the manufacturer. Again, too, the new fertilizer regulations require that the percentages of plant food in all mixed fertilizers shall be stated in whole numbers without any fractions or decimals. This also is in the interest of simplicity and economy.

Ever since commercial fertilizers have been on the market, there have been certain "low-grade" kinds carrying only 9 to 14 units of plant food per ton,—(a 2-8-3 for example). These are made up of the lower grade materials and always contain more or less filler or "make-weight". Since the costs of labor, bags and freight on these goods are just as great as on the high-grade goods, it is quite evident that the cost per pound of plant food in them will be greater than in the high-grade goods. In other words, if I have \$50.00 to spend for fertilizer, I am going to buy one ton of a \$50.00 grade rather than two tons of a \$25.00 grade, and then use only half as much per acre.

Surprising as it may seem, mixed fertilizers are about as cheap and some fertilizing materials like sulphate of ammonia are cheaper than they were before the war. In mixed car lots farmers can now buy nitrogen in the form of ammonia delivered at their stations for 10 cents a pound, phosphoric acid for 5½ cents, and potash for a little less than 5 cents.

If the farmer has the cash or can secure credit at a reasonable rate, he should not curtail his fertilizer supplies at current prices. Ample fertilization is one of the best forms of crop insurance, as was demonstrated last year by John R. Jackson up at Colebrook, N. H., who won the potato club contest with a yield of 506 bushels per acre. Mr. Jackson used one ton of a 5-8-7 fertilizer and one-half ton of super-phosphate per acre. What we need today in our agriculture for economic production is *fewer acres well tilled and better fertilized*.

Perhaps the most important recent change to be made in our fertilizer practice is discarding the old custom of expressing the nitrogen content of our fertilizers in terms of ammonia. This change became effective in all the New England States and in six other Northeastern States January 1, 1932. We used to read our fertilizer guarantee on the bag something like this:—Nitrogen 4.1% ; equivalent to Ammonia 5%. This dual statement was always confusing since many people thought it meant 4.1% of nitrogen and in addition 5% of ammonia. Our old friend Ammonia is no longer in the line-up, and nitrogen will be guaranteed as nitrogen only.

In most cases the new grades of fertilizer will contain the same percentage of nitrogen that they formerly contained of ammonia. This means that the farmers will get about one-fifth more nitrogen than they have been accustomed to getting, and we hope for the same price.

NEW METHODS OF MAKING HAY

Some new and interesting methods of making hay have been invented since that poetic period when,

“Maud Miller on a summer day,
Raked the meadows sweet with hay.”

The first and perhaps the most practical of these new methods is *chopping from the field*. The hay is cut, cured, raked and loaded in the field as usual. The load is drawn to the barn where the hay is fed by two pitchers to a large chopper, which cuts and blows it directly into the hay mow.

The chopper, which may also be used for cutting ensilage, is simply an enlarged ensilage cutter with one to three spiked rollers to assist in feeding the hay to the knives. The blower distributor pipe is swiveled so that it may be directed to different parts of the mow at intervals, thus making it unnecessary to have any men storing the hay away in the heat of a hot hay mow.

It has been found that chopped hay requires only from two-thirds to one-half the space for storage as does uncut hay. This means that the farmer who cuts his hay increases his storage capacity from 50 to 100 per cent. The chopped hay is easily forked and handled. Enough long pieces go through the chopper to act as a binder for a good forkful, so that tearing apart is not necessary.

It is claimed that storing hay in chopped form materially reduces the fire hazard. Chopped hay packs so much closer that the circulation of air through the hay is retarded to such an extent that there is not a sufficient supply of oxygen to cause spontaneous combustion. Some careful comparative tests have been made at the various stages of heating of both chopped and uncut hay which had received the same amount of curing and the same type of storage. At no period did the temperature of the chopped hay exceed that of the uncut.

It is also important to note that in chopping, the occasional uncured bunches are thoroughly mixed with the drier portions which absorb the excess moisture and thus prevent the mouldy spots which we sometimes find in stored hay, particularly clover.

Present evidence seems to indicate that all classes of livestock relish the chopped hay just as much as the uncut of the same kind and quality. In fact, it has been found that the cattle clean up the cut hay better

than the uncut so that less waste of the coarser stems finds its way to the bedding and manure.

The choppers may be operated by gas engines, tractors or electric motors. About the same amount of power is required as for cutting ensilage. The larger choppers, however, require more power, 15 to 25 H.P., than the ordinary ensilage cutters.

Storing hay by the chopping method costs about the same as the common method of unloading with a hay fork. The extra cost of 15 to 20 cents per ton for gas and oil is offset by the saving in man power over the common method. The chopping is somewhat faster than the fork method, as only 10 to 15 minutes is required to cut and blow a ton. The farmer who has 100 tons or more of hay to store every year should investigate this new chopping method.

The second new method of making hay is the artificial drying process. The main advantage of artificial drying is that it removes the weather hazard, and in most cases will produce a better quality of hay, that is, one higher in protein because practically all the leaves and finer stems are saved.

There are several types of these driers on the market and they vary greatly in size and capacity. One of the more common types is the rotary, direct-drying type with a capacity of one ton of water evaporated per hour. This, by the way, would be considered a small machine.

The green material, after being run through an ordinary ensilage cutter, is blown directly into the drying drum where it comes in contact with the hot gases of combustion from the furnace or oven. Inside the outer drum, which is about six feet in diameter and 16 feet long, are two smaller concentric ones. The green material, along with the gases, is drawn through by suction, first going through the smaller drum, then back through an intermediate one, and finally making a third trip next to the outer drum. After going through the fan, it passes a dust collector and from there into a large hopper ready for bagging.

With the type of drier in question, two power units are required, one of 7 or 8 H.P. to run the cutter and one of 15 H.P. to operate the fan, drum, fuel oil pump and air pump. Either tractors or electric motors may be used as a source of power.

For heating the drying gases, fuel oil is used, the average consumption being about 31 gallons per ton of water evaporated, or from 40 to 50 gallons per ton of dried hay secured. The fuel consumption varies rather widely with the different materials and with their degree of wetness. Drying alfalfa during rainy spells required as much as 70 to 95 gallons of oil per ton of hay.

Since the green material comes in contact with the gases at a temperature of 1,000 to 1,100 degrees, there is always some fire risk. Care must be taken to prevent the dried material from being forced back into the hottest gases and becoming overheated.

At the present time the artificial method of drying hay is too expensive for the average farmer. He will have to depend upon old Sol and the wind for some years to come. The method, however, does have possibilities for development for large scale production in certain sections of the country where haying is a hazardous job.

SOME TIMELY GARDEN HINTS

A recent interesting development for the home gardener is the electric hot bed. The advantages of this device are its cleanliness and the ease with which it may be operated. The heat is supplied by an electrical lead-covered heating cable which costs less than three dollars for a two-sash bed. A thermostat may be used to regulate the heat, although it is rather expensive and not necessary if one is careful in turning the

current on and off. The amount of energy used is from two to four kilowatts per sash per day, depending upon the outside temperature.

The grower of muskmelons, cucumbers, squash, and other vine crops will find that plant protectors made of special waxed paper with wire arches are a great help in the early maturing of these crops. The seed may be planted under the protectors three to four weeks earlier than usual. The protectors should remain over the hills until the plants completely fill them and danger of frost is past. Usually the best time to plant is around May 1st.

Peat moss has been found a rather effective substitute for manure in many gardens. While it contains very little fertilizing material, it lightens the soil and prevents moisture loss.

Home gardeners have not learned how to properly fight flea beetles, cucumber beetles, squash bugs, celery blight, and cucumber scab. They will do well to buy rotary dusters and dust their crops at least once a week. Dusting is much simpler than spraying. The dust used is made up of one part powdered copper sulphate and four parts of chemically hydrated lime. If a poison dust is wanted to control leaf-eating insects, it should be made of one pound of copper sulphate, one-half pound arsenate of lead, and three and one-half pounds of chemically hydrated lime. If the prepared dust is to be bought, get what is known as a 20-80 dust. All dusting should be done while the dew is on the plants, before seven in the morning or after seven at night.

Among the new tomatoes on the market is the variety known as the Prichard. It shows promise of being valuable for the home garden.

Among other new varieties of vegetables well worth trying are Spanish Gold, a very early, high-quality sweet corn; Harris Earliest pepper; Most Prolific early pepper; Tender Sweet and Perfection carrots; Golden Phenomenal and Salt Lake celery, and Bison Tomato. The latter is an extremely early tomato.

When do you kill the weeds in your garden? If you kill them as soon as they get started, the job is easy and the labor of keeping the garden free from them is comparatively simple, but if you wait until they have made some growth they will starve out your crops and you will have to put in four to five times as much effort in destroying them as you would have earlier.

Should vegetables like cucumbers, melons, corn, and beans be planted in hills or in drills? This is a question often asked the vegetable specialist. While there are some advantages in the hill method, especially in the matter of hoeing and cross cultivation, certainly each plant will have a much better individual chance if it is all by itself, six inches or more from its neighbor plant. Cucumber growers are spacing their plants a foot apart instead of allowing four plants to grow in a hill four feet apart. Perhaps for the home garden, plants spaced equally in a drill are preferable to those in hills.

The asparagus beetle may be controlled by allowing a few asparagus plants to grow and keeping them covered with arsenate of lead.

The rose chafer has done considerable damage during the last few seasons. Hand picking on a small scale or spraying the crop with sweetened arsenate of lead are control measures recommended. They are not entirely satisfactory.

While many home gardeners use salt on their asparagus, this practice is not recommended by experimental evidence. Probably the only value of salt is as a weed killer. Why not kill the weeds by cultivation rather than with salt?

Pea blight has done a great deal of damage in backyard gardens. Apparently this disease can be controlled only by planting peas in soil which has not grown the crop for at least eight or ten years. Once the disease is in the soil, it is difficult to eradicate.

Home gardeners often have difficulty in growing good spinach, yet spinach is rather easy to grow if the following precautions are observed. First, lime the soil heavily. Use at least one pound of lime to 20 feet of row. Second, plant the seed early before the first of May, if possible, in a well prepared seed bed. Third, enrich the soil with manure or commercial fertilizer so that the spinach has plenty of food to grow on.

The small garden tractor is an easy way of cultivating a garden of an acre or more. People who are interested in machinery usually have excellent success with them, while those who cannot handle machinery are likely to make a failure of tractor cultivation.

The Howard Supreme strawberry is a new variety giving excellent results. It is an imperfect berry and must be planted with a perfect variety. Howard 17 and Howard Supreme planted in alternate rows should prove satisfactory.

Among the newer varieties of raspberries, the Chief and the Viking come highly recommended. Both are hardy and partially resistant to mosaic disease which has proved so disastrous to that grand old variety, Cuthbert. Mosaic disease on raspberries may be recognized by the puckery drawn-in appearance on the leaves. It is carried from plant to plant by means of insects. If you have any suspicion of mosaic disease in your garden, pull up the plants and destroy them. There is no cure for mosaic disease.

A home gardener in central New Hampshire grows peanuts, okra, eggplant, sweet and hot peppers, black-eyed pea beans, watermelons, and muskmelons in her garden. While these are by no means commercial crops in this section of the country, it certainly adds to the fun of gardening to try out new plants.

Among peculiar practices found in home gardens is the planting of nasturtiums in hills of cucumbers to keep off the cucumber beetle. If this method were satisfactory, it would be a very easy way of getting rid of a troublesome pest but most of us will prefer to keep the plant well dusted with a poisonous Bordeaux mixture.

Many people cut off the leaves of tomato plants to thicken the stem or force the growth into the fruit. When it is realized that the digestive organs of the plant are in the leaves, that the food that constitutes the fruit, etc., is manufactured almost entirely in the leaves, the foolishness of this practice may be understood.

Many home gardeners use salt on cabbage leaves to control cabbage worm. This is not a recommended practice. It is much better to make a mixture of lime and arsenate of lead, using 10 per cent lime, and dust the plants with this mixture as often as necessary. There need be no fear of poisoning the cabbage because the head grows entirely from the inside.

Many home gardeners hill up root crops like onions, beets, carrots, and parsnips. This is not a good practice. Covering the bulbs of these crops with soil tends to injure their growth considerably.

Many home gardeners still insist on planting celery in trenches. This is a very foolish practice considering that it is almost impossible to weed and cultivate such celery, that the soil washes in during a heavy rain and that one is very likely to plant the celery in the poor subsoil. Celery should be planted on the surface of the soil, six to eight inches apart, and handled the same as lettuce or any other crop.

HOUSEHOLD HINTS—1933.

Have your beds fitted with rubber tired castors. They will move easily to get the best air and will not scratch the floors.

Find a place for a large waste basket in your kitchen. It will save many steps when the marketing is being put away.

Keep a bread board and knife handy to your bread box. It will save many minutes if it does not have to be hunted.

A wax finish on the kitchen linoleum makes it possible to wipe up spills easily with a bit of paper and the floor will need to be cleaned less often.

Wash silk stockings before wearing—with a mild soap—and always rinse in clean water to which a little vinegar has been added. They will wear longer.

Clean your white hat with corn meal dampened with lemon juice. Spread it on, let it stand an hour or more, and then brush off with a clean brush.

Leather pocketbooks of any color can be cleaned and made to look new by using the shoe cream which is sold for cleaning shoes of the corresponding color.

Contrary to the usual opinion, a wet umbrella should dry *closed*. Set it with the handle down. This prevents the cover from being stretched and rust forming where the ribs are joined together.

Apply a little ordinary floor wax to the woodwork around the pulls of drawers and cupboards where the luster has been lost by numerous washings and at the same time save future washings by protecting these areas from soiled fingers.

If you have trouble in making candles fit securely in their holders, try pouring hot water into the candle bowl of the candle stick, let it stand to heat the holder, pour out the water and put the candle in place immediately. If one application of water does not heat it sufficiently repeat the process.

Cardboard boxes, books, and other bulky objects in an overcrowded drawer often accidentally shift around in such a way that the drawer cannot be opened. At such times it is always difficult to find something that is at once thin enough to enter the crack at the top of the drawer and strong enough to press down the obstruction. There is nothing better for this than the common kitchen spatula. It is thin enough to enter a very narrow opening, yet sufficiently stiff to hold down the misplaced object long enough for the drawer to be pulled open.

To save time in cooking, especially on coal, wood or electric stoves, use flat-bottomed sauce pans or kettles with lids that fit tightly.

Try using sour cream in your omelette in place of milk. You will like its delicacy.

To clean oven-browned pie dishes, soak them in a strong solution of pure borax and water.

When you burn a cake, forget about it until it is thoroughly cold. Then take the lemon grater and run it over the burnt spot. It will scrape all the burn off and leave the cake smooth and ready for the icing.

If your bread for sandwiches is too fresh to slice easily place it in the refrigerator to get thoroughly cold. This will harden it just enough to make thin slicing possible.

To keep the white color of cauliflower add vinegar or lemon juice to the cooking water—about a tablespoonful to each quart of water. Do not cover the kettle.

If your cakes are coarse grained try reducing the proportion of baking powder. Many kinds on the market require a smaller amount than old-time recipes call for.

To remove grease and grime from the hands, try adding a little sugar to the soap lather. The dirt will disappear like magic, leaving the hands soft and white. For this purpose it is well to keep the sugar in a tin can or a mayonnaise jar, the lid of which has been perforated. The sugar then can be shaken out without danger of wetting the contents of the can or jar and without loss of time.

Try serving a fruit cocktail made of melon balls in maple syrup.

CHARADES

1

My first, on Nature's application
Will emphasize a man's relation
To all his fellow men.
And when a fellow is my second
A breach of sportsmanship 'tis
reckoned
To jump on him again.
This is particularly true
When, after breaking bravely
through
The adversary's line,
And fighting fiercely for my whole,
Across the line that marks the goal
A hero lies supine.

L. B. R. Briggs

2

My first by bards unhonored and
unsung,
But daily on my fireside comrade's
tongue.
Even as of old, since world and
time began,
My lovely second rules the heart
of man.
My whole, a humble, happy life be
thine—
And the glad meadows, and the
lowing kine.

L. B. R. Briggs

3

With my first (a "quarter")
Tip the Pullman porter.
How my second feels
Other people's heels!
On my whole I stepped
While my neighbor slept.

L. B. R. Briggs

4

My First

I try to take the place of locks,
Deficiencies concealing.

My Second

I love a hoax and practical jokes
With little regard to feeling.

My Whole

To and fro my flag shall go
So long as the soldiers need it;
The task is mine to give the sign,
And theirs the task to heed it.

L. B. R. Briggs

5

If you're a certain kind of monk
Or Highbrow, you my First may
wear;
Then look among the chimney tops
And see them in a plenty there;
While if the one at your fireside
Should seem to you a trifle sooty,
Remember it is there for use
And very seldom for its beauty.
It's not good form to tip my next
If you are proud and haughty,
But of a summer afternoon
You'd be excused if you took
forty.
There are some rare occasions when
My Whole perhaps is justified;
But as a rule its practice should
Emphatically be decried.

Mary Russell Hodge

6

My First:

When winter winds blow cold and
bleak,
Then seek me on the mountain
side;
I'll gladly come and do my part
To glorify your Christmas-tide.

My Second:

I'm useful, beautiful and strong;
I'm sometimes cheap but oftener
dear;
In every home I'm always found,
To every hearth I bring good
cheer.

My Whole:

My cloud capped towers, my gor-
geous palaces,
My solemn temples and my donjon
keeps,
My mountains, rivers, seas and
placid lakes,
Canyons and beetling cliffs and
vasty deeps,
Where over and through all by
night and day
The stars hold undisputed sway;
All these and many amazing things
beside
You'll see if you examine my in-
side.

Mary Russell Hodge

ANSWERS TO CHARADES IN LAST YEAR'S ALMANAC.

1. Nightmare.
2. Bookworm.

3. Hammock.
4. Bobolink.

THE AUTOMOBILE IN NEW ENGLAND.

The laws and regulations relating to the operation of motor vehicles are subject to frequent changes, and some may possibly occur after the time of our going to press.

These laws are taken from State Law books and substantiated by the Registrar of Automobiles in each New England State in October, 1932.

MAINE

CAR REGISTRATION: With Secretary of State. Expires December 31. May be used until March 1.

FEES: 25 cents per horse power; also 25 cents for each 100 pounds of weight and 50 cents if tires are solid. Between Sept. 1 and December 31 half-fee.

DRIVER'S LICENSE: To persons 15 or over, if application is signed by either parent, or, if without parents, by employer. Fee \$2. Expires Dec. 31; chauffeur's license to persons over 18, fee \$3.00.

LIGHTS: From half hour after sunset to half hour before sunrise. Must conform to regulations of Secretary of State. If vehicle is so constructed or controlled that it can exceed a speed of 15 miles per hour, its front lamps must render discernible objects 200 feet ahead on level road and at the same time at least 7 feet to the right of the axis of the vehicle for 100 feet. No part of the light beam when projected 75 feet or more ahead of lamps is to be more than 42 inches higher than surface on which vehicle stands. If vehicle is so constructed or controlled that it cannot exceed a speed of 15 miles per hour, the requirements are less.

SPEED: 15 miles per hour when passing a school at recess or during opening and closing periods and when approaching within 50 ft. of an intersection. 25 miles per hour in business and built-up portions and 35 miles an hour in most other places. Speed must be reasonable and proper.

NON-RESIDENTS: Motor vehicles, trucks, tractors and trailers, weighing 1½ tons or less, may be operated without a Maine registration or license if properly registered in a home state, which gives Maine residents same privileges.

MOTOR TRUCKS: Registration fees: \$10 on 1000 pounds or less capacity to \$150 on more than five tons.

INSURANCE: In case of conviction of violation of certain sections of the automobile law, proof of financial responsibility required; right to operate suspended until it is. Such proof may be evidence of insurance or bond or money or collateral.

NEW HAMPSHIRE

CAR REGISTRATION: With the Commissioner of Motor Vehicles. Expires December 31.

FEES: Vehicles equipped with pneumatic tires, not exceeding 4000 pounds, 35 cents per 100 pounds. The fees increase with weight until they reach 60 cents per 100 pounds on weights of over 8000 pounds. For all vehicles with hard rubber tires 20 cents per 100 pounds is added to the above rates. For all vehicles with iron, steel or other hard tires 40 cents per 100 pounds is added to the above rates. The minimum fee is \$10 for a passenger vehicle. No motor vehicle owned or controlled by a resident may be registered without a permit from the city or town where such owner resides. Fee for permit varies from 17 mills to 3 mills per \$1 of list price according to year of manufacture, and not exceeding \$10 in all. Exemption where applicant for permit has been assessed on property used in purchase of car.

DRIVER'S LICENSE: Persons 16 or over. Original license and examination, \$3. Expires December 31; renewals, \$2; chauffeur's license to persons over 18. Fee, \$5; renewals, \$2.

NON-RESIDENT OWNER: A non-resident owner of a motor vehicle which is used solely for pleasure and is not used for carrying passengers or property for a profit or for hire, and which has been duly registered for the current year in the state or country of which the owner is a resident, and in accordance with the laws thereof shall not be required to register such motor vehicle in this state.

OPERATOR'S LICENSE: No owner of such motor vehicle and no non-resident chauffeur or driver of such vehicle who is the holder of a license to drive such vehicle in the state or country in which he resides shall be required to purchase a license to drive such vehicle within this state.

LIGHTS: Between half hour after sunset and half hour before sunrise. Lights from front lamps to be visible at least 200 feet in the direction in which the vehicle is proceeding. Headlights must have dimmers.

SPEED: *Prima facie* unlawful if exceeding 15 miles an hour passing schools, at intersecting streets, on curves and grades where view is obstructed, and in business districts where there are no traffic officers or signals; exceeding 20 miles on other highways in business districts, or in residence districts; exceeding 35 miles elsewhere.

VERMONT

CAR REGISTRATION: With Commissioner of Motor Vehicles. Expires December 31.

FEES: Motor vehicles of the pleasure type weighing 2000 pounds or less the fee is \$16; from 2000 pounds to 2500 pounds inclusive, \$19; 2500 pounds to 3000 pounds inclusive, \$23; 3000 pounds to 3500 pounds inclusive, \$28; 3500 pounds to 4000 pounds inclusive, \$33; 4000 pounds to 4500 pounds inclusive, \$38; 4500 pounds or more, \$43. Manufacturer's weight, available, to be accepted.

DRIVER'S LICENSE: To persons 18 or over. Junior's license to persons 16 and 17, \$2.50. After Aug. 1, one half fee.

LIGHTS: From half hour after sunset to half hour before sunrise. Rear lights must render figures on number plate visible 50 feet to the rear. Front lights must render a substantial object on the ground clearly visible 150 feet ahead. A lighting device of over four candle power, equipped with a reflector, must not be used unless the light-beam 75 feet ahead shall not rise more than six inches above the height of the bulb, and in no event more than 42 inches above the level surface of the road.

SPEED: A motor vehicle shall not be operated on a public highway, as defined in this act, in a careless or negligent manner, nor upon a bet, wager or race, nor for the purpose of making a record, nor in a manner to endanger or jeopardize the safety, life or property of any person. Nothing herein contained shall be so construed as to affect the rights of the selectmen of a town or the proper officials of a city or incorporated village, to make special regulations as to the speed of such motor vehicles upon narrow or dangerous roads or ways, nor to limit the speed of motor vehicles in city or village streets provided such limit is fixed at not less than twenty miles per hour.

NON-RESIDENTS: Non-residents who comply with the laws of their home state as to registration and license are exempt from the requirements of the Vermont Law in this respect to the extent that like privileges are granted in home state. Non-residents may register in Vermont for a period of four months at one-half of the regular fee.

MOTOR TRUCKS: Registration fees: 60 cents per 100 pounds if weight not over 6000 pounds. The fee increases with weight, the maximum being 90 cents when the weight is over 13,000 pounds. Minimum fee to be \$25. Half rates for registration between August 1 and November 15, and quarter rates after November 15. Motor vehicles of 16,000

pounds gross weight limit of load permitted on town roads; 20,000 lbs. on state aid roads is limit allowed unless a permit is obtained from the State Highway Department. Non-resident trucks with manufacturer's rated capacity above 3000 lbs. must be registered in Vermont if operated on Vermont highways unless a permit is obtained before entry. Trucks of two tons or less not to be operated more than 25 miles per hour; if over two tons, not more than 20 miles per hour; if over 4 tons, not more than 10 miles per hour on a highway. Motor trucks and trailers not to exceed 8 feet in width or 12 feet in height and must be equipped with mirror.

INSURANCE: Any person convicted of violating sections 86, 87, 88 and 91 of the Motor Vehicles Act, and any person whose motor vehicle is involved in an accident when it appears to the Commissioner that the operator was at fault must furnish proof of financial ability to respond in damages or lose his right to operate. Such proof may be evidence of insurance in an authorized insurance company or a bond.

MASSACHUSETTS

CAR REGISTRATION: Annually with Massachusetts Registrar of Motor Vehicles. Expires December 31.

FEES: Less than 30 horse power, \$10 when non gasoline driven and \$3 when gasoline driven; 30 to 40 horse power, \$15 when non gasoline driven and \$4.50 when gasoline driven; 40 to 50 horse power, \$20 when non gasoline driven and \$6 when gasoline driven; 50 horse power or more, \$25 when non gasoline driven and \$7.50 when gasoline driven. From October 1 to December 31 half fee.

For every gasoline driven automobile used for the transportation of goods, wares or merchandise, 15 cents for every hundred pounds of the weight of such vehicle and of its carrying capacity, but in no event less than \$6.

DRIVER'S LICENSE: To persons 16 and over. Fee \$2. Valid one year from date of issue. First examination \$2, subsequent examination \$1.

LIGHTS: Between half hour after sunset and half hour before sunrise. Front lights must show 200 feet, must have red light showing in rear and white light illuminating the registration number. No head lamp without a lens approved by the Registrar to prevent glaring rays.

SPEED LIMITS.—*Section 17.* No person operating a motor vehicle on any way shall run it at a rate of speed greater than is reasonable and proper, having regard to traffic and the use of the way and the safety of the public. In general a car shall be operated 15 miles an hour in turning corners, in the thickly settled districts, such as the cities, the speed is 20 miles an hour and for the outlying sections, such as State highways, the speed is 30 miles an hour. Good judgment and the safety of the public are the best guides to proper speed.

NON-RESIDENTS: A non-resident may operate in this state 30 days if he is properly registered in his home State. At the expiration of 30 days he must apply to the registry for a permission to operate longer. This permission will be granted without charge if the owner of the car submits evidence of financial responsibility or liability insurance such as is imposed by Mass. on its owners.

INSURANCE: Compulsory. Motor vehicles cannot be now registered in Massachusetts without being insured to cover personal injuries.

RHODE ISLAND

CAR REGISTRATION: With the State Board of Public Roads. Expires December 31.

FEES: Automobiles with pneumatic tires, minimum fee \$8 for gross weight of 2500 pounds or less. The fee increases with the gross weight. For cars whose gross weight is more than 6000 pounds the fee is \$23.

MOTOR TRUCK OR TRACTOR WITH PNEUMATIC TIRES: The fee varies with the gross weight. The minimum fee for vehicles whose gross weight is 3000 pounds or less, is \$12.50 and for vehicles whose gross weight is more than 28,000 pounds it is \$100.

For the registration of every automobile, motor truck or tractor, when equipped with other than pneumatic tires, there shall be added to the above gross weight fees a charge of ten cents for each one hundred pounds of such gross weight.

DRIVER'S LICENSE: To persons 16 or over. Examination required. License or renewals, \$2. Valid one year from date of issue.

LIGHTS: From one-half hour after sunset to one-half hour before sunrise. Headlights must illuminate objects 200 feet ahead. Register number must be visible sixty feet to the rear.

SPEED: No person shall operate a motor vehicle upon the public highways recklessly or at a rate of speed greater than is reasonable or proper, having due regard to the width, street intersections, conditions, traffic, weather or use of such highways, or so as to endanger property or the life or limb of any person. 20 miles per hour in thickly settled sections and 35 miles per hour elsewhere.

CONNECTICUT

CAR REGISTRATION: With the Commissioner of Motor Vehicles. Expires December 31.

FEES: Minimum fee, \$15. A pro rata reduction is allowed on applications for registration. The minimum fee for pro rated registration is \$3.

DRIVER'S LICENSE: To persons 16 or over upon examination. Expires last day of February. Fee for license, \$3. For examination, \$2.

LIGHTS: From half hour after sunset to one-half hour before sunrise, and when smoke or weather conditions make it impossible to see 200 feet ahead. Headlights must be visible for 500 feet in clear weather and the top of the lights not over 56 inches from the ground. Must have a red light behind and a white light which illuminates number plates.

SPEED: Motor vehicles must be operated at a speed that is reasonable, having regard to width, traffic and use of the highway, intersection of streets and weather conditions.

NON-RESIDENTS: A non-resident over 16 years of age, who has complied with the laws of his state or country, may operate without Connecticut registration or license for the same period allowed Connecticut cars in his home state or country. Reciprocity is not extended to licensed operators of the State of New York unless they are at least eighteen years of age. A non-resident cannot operate in Connecticut any vehicle carrying passengers for hire unless he and the car are licensed in Connecticut. A non-resident cannot operate in Connecticut a commercial vehicle which carries a greater pay load than would be allowed for the same vehicle if registered in Connecticut.

MOTOR TRUCKS: Registration fees: Having pneumatic tires on all surfaces in contact with the ground, the fee is \$15.00 on trucks of $\frac{1}{2}$ ton or less capacity with increased fees for each half-ton of increased capacity. For a 7-ton capacity the fee is \$292.50.

Having solid rubber or cushion tires wholly or in part, the fee is \$30.00 on trucks of $\frac{1}{2}$ ton or less capacity with increased fees for each half-ton of increased capacity. For a 7-ton capacity the fee is \$350.00.

INSURANCE: Any person convicted of violating certain specified sections of the law relating to motor vehicles, must furnish the Commissioner with proof of financial ability to respond in damages or lose his right to operate. Such proof may be evidence of insurance or a bond or the deposit of money or collateral.

POETRY, ANECDOTES AND PLEASANTRIES.

THE FRIGATE CONSTITUTION
(Old Ironsides)

The most historic and revered ship in the world today.

She won more battles, captured more prizes, sailed more miles, trained more navy officers and actual seamen than any other ship in the world, and doing this received less injury and sustained fewer losses than can compare with her in amount and call of service.

This beloved United States battleship fought in forty-two battles and won all of them.

In 1830 when this frigate was to be broken up as unfit for service, the following poem was written by Oliver Wendell Holmes.

Ay, tear her tatter'd ensign down!
Long has it waved on high,
And many an eye has danced to see
That banner in the sky;
Beneath it rung the battle-shout,
And burst the cannon's roar;
The meteor of the ocean air
Shall sweep the clouds no more!

Her deck, once red with heroes' blood,
Where knelt the vanquish'd foe,
When winds were hurrying o'er the flood,
And waves were white below,
No more shall feel the victor's tread,
Or know the conquer'd knee;
The harpies of the shore shall pluck
The eagle of the sea!

O, better that her shatter'd hulk
Should sink beneath the wave;
Her thunders shook the mighty deep,
And there should be her grave;
Nail to the mast her holy flag,
Set every threadbare sail,
And give her to the god of storms,—
The lightning and the gale!

Oliver W. Holmes.

The citizens and school children of America rallied to the cause and saved the ship.

In 1930 when the American Legion National Convention was held in Boston, "Old Ironsides," then restored and re-equipped, was rededicated. The Legion in their endeavor to pay tribute to this historic vessel met great opposition in certain quarters, but with the backing of the President of the United

States and other high naval officials, they carried out their program.

The old ship was moved down Boston Harbor through two lines of modern battle-ships of the North Atlantic fleet—each ship with all colors flying; with all officers and men standing at salute on their decks; with every band playing "The Star Spangled Banner" and every gun booming a twenty-one gun salute.

Aviators flew over "Old Ironsides" dropping flowers from the air.

From her deck a program of music and speeches by some of the greatest men of our time, telling her wonderful history, was broadcast across this country from coast to coast.

THE BACKWOODSMAN

The silent wilderness for me!
Where never sound is heard,
Save the rustling of the squirrel's foot,
And the fitting wing of bird,
Or its low and interrupted note,
And the deer's quick, crackling tread,
And the swaying of the forest boughs,
As the wind moves overhead.

I look around to where the sky
Meets the far forest line,
And this imperial domain—
This kingdom—all is mine.
This bending heaven, these floating clouds,
Waters that ever roll,
And wilderness of glory, bring
Their offerings to my soul.

Though when in this my lonely home,
My star-watch'd couch I press,
I hear no fond "good-night"—think not
I am companionless.
O, no! I see my father's house,
The hill, the tree, the stream,
And the looks and voices of my home
Come gently to my dream.

And in these solitary haunts,
While slumbers every tree
In night and silence, GOD himself
Seems nearer unto me.
I feel HIS presence in these shades,
Like the embracing air;
And as my eyelids close in sleep,
My heart is hush'd in prayer.

Ephraim Peabody.

NEW ENGLAND

My dear, my loved New Eng-
land

With rivers, groves and sea.
Your children thrill with love
for you

Wherever they may be.

Your quaint and rambling by-
ways

Of picturesque Cape Cod.
Your smooth and level high-
ways

All edged with emerald sod.

Your forests deep, of pine trees,
Like dim cathedrals stand.

Your sparkling lakes beneath
the breeze

Ripple on snow-white sand.

Oh, loved and dear New Eng-
land,

Where'er your children roam.
These six States of the Union
Are another name for home.

—*Russell's Rhoda.*

Samson was a strong man
yet could not pay money before
he had it.—*Proverb.*

MAIN STREET

I like to look at the blossomy
track of the moon upon the
sea,

But it isn't half so fine a sight
as Main Street used to be
When it all was covered over
with a couple of feet of snow,
And over the crisp and radiant
road the ringing sleighs
would go.

Now, Main Street, bordered
with autumn leaves, it was a
pleasant thing,

And its gutters were gay with
dandelions early in the
Spring;

I like to think of it white with
frost or dusty in the heat,
Because I think it is humaner
than any other street.

A city street that is busy and
wide is ground by a thou-
sand wheels,

And a burden of traffic on its
breast is all it ever feels:

It is dully conscious of weight
and speed and of work that
never ends,

But it cannot be human like
Main Street, and recognise
its friends.

There were only about a hun-
dred teams on Main Street in
a day,

And twenty or thirty people, I
guess, and some children out
to play.

And there wasn't a wagon or
buggy, or a man or a girl or
a boy

That Main Street didn't remem-
ber, and somehow seem to
enjoy.

The truck and the motor and
trolley car and the elevated
train

They make the weary city
street reverberate with pain:
But there is yet an echo left
deep down within my heart
Of the music the Main Street
cobblestones made beneath a
butcher's cart.

God be thanked for the Milky
Way that runs across the
sky,

That's the path that my feet
would tread whenever I have
to die.

Some folks call it a Silver
Sword, and some a Pearly
Crown,

But the only thing I think it is,
is Main Street, Heaventown.

—*Joyce Kilmer.*

Truth is as impossible to be
soiled by the outward touch as
the sunbeam.—*Milton.*

Things Our Ancestors Laughed
At 141 Years Ago

A CLERGYMAN observed to
his friend, that upon the last
Sabbath, he was much dis-
turbed by a Cow, who looked in
at the door, and bellowed in his
face. Sir, says the other, a Calf
has no right in the Pulpit.

—*Old Farmers' Almanac, 1793.*

A JUSTICE of the Peace, re-
marked to a Clergyman who
rode on elegant horse, that he
was prouder than his master.
Why really, Sir, retorted the
Parson, so many asses have
been converted of late, into
Justices, that I could not find
one to ride upon.

—*Old Farmers' Almanac, 1793.*

John Bunker and Bill Springer owned adjoining farms up New Hampshire way and were great friends until certain happenings in connection with their livestock caused much trouble and a serious feud sprang up.

In that year there was an epidemic of kidnaping through an influx of a foreign element and one gang, (only knowing about the old friendship) wrote a black-hand letter to Bill Springer saying, "Send us \$5,000 at once or we shall kidnap your neighbor, John Bunker."

Bill wrote right back to the secret address given, saying, "Yours received. Sorry I haven't got that much money, but I am very much interested in your proposition."

In a certain town of Northern Vermont a group of young people having put on successfully one of the old-time dramas decided they would go on the road and make a tour of the state.

They returned home rather unexpectedly and on their arrival one of the selectmen who met them asked, "Did you play Burlington?"

"Oh yes!" answered the leading man, "we played Burlington."

Selectman: "Did you have a long run?"

Leading man: "No, they only chased us ten miles."

AN old continental arrived at an inn, and asked for refreshment. The hostess set before him a bone of ham, and crust of bread. Her son, who had been an officer, gave the poor fellow a shilling when he had done picking, and bid him march off. Soon after the old woman comes in, to look for her pay. Mother, says the officer, what might the picking that bone be worth? — Why about one and six pence, these hard times. Well, cries the humane son, I have made a fine bargain, and saved six pence, for I gave him but a shilling to pick the whole.

—*Old Farmer's Almanac, 1793.*

Medic: The right leg of the patient is shorter than the left, which causes him to limp. Now what would you do in a case of this kind?

Voice (from rear of classroom): Doc, I'd limp, too.

—*College Humor.*

Professor: I would like a preparation of phenylisothiocyanate.

Drug Clerk: Do you mean mustard oil?

Professor: Yes, I can never think of that name.

—*Coe Zip 'N Tang.*

Byron swam the Hellespont,
Ederle the English channel,
I merely waded in the lake,
And I'm all wrapped up in flannel.

—*Western Reserve Red Cat.*

The thread of our life would be dark, Heaven knows! if it were not with friendship intertwined.—*Thomas Moore.*

Dost thou love life? Then do not squander time, for that is the stuff life is made of.—*Benj. Franklin.*

I am in love with this green earth.—*Charles Lamb.*

ADVICE TO THE LADIES 137 YEARS AGO

"To all the Ladies whom it may concern;

"That a good wife should be like three things; which three things she should not be like:

"First, she should be like a snail, always keep within her own house; but she should not be like a snail to carry all she has upon her back:

"Second, she should be like an echo, to speak when she is spoke to; but she should not be like an echo, always have the last word:

"Third, she should be like a town clock, always keep time and regularity; but she should not be like a town clock, to speak so loud, that all the town may hear her."

—*Old Farmer's Almanac, 1796.*

THE NEW FEDERAL TAXES
Enacted on June 6, 1932

INCOME TAXES

Every single person (whether or not head of a family) and every married person not living with husband or wife, earning more than \$1,000 must file a return. Every married person, living with husband or wife, earning \$2,500 or more must file a return. Where the combined earnings of both are \$2,500 or more a return is required, or each may file a return, dividing the exemption in any manner they may agree upon.

If the **gross** income is \$5,000 or more, a return is required even if the net income is less than the personal exemption. Gross income is defined as gains, profits and income derived from salaries, wages, compensation for personal services, profits from professions, trades, business, commerce, or sales, dealings in property, rent, interest, dividends, securities, or gains or profits derived from any source whatever. In a trading concern gross income means gross sales less the cost of goods sold, such cost, however, not to include overhead which is chargeable to selling or office costs.

INCOME TAX TABLE FOR 1932 INCOME RETURNED IN 1933

Explanation

The Table following is for a married person or the head of a family, with a personal exemption of \$2,500, having no dependents and receiving no dividends or partially exempt interest.

Income Tax Table

Net Income	Total Tax	Net Income	Total Tax
\$1,000	0	\$ 26,000	\$ 2,700.00
2,000	0	28,000	3,080.00
3,000	\$20.00	30,000	3,480.00
4,000	60.00	35,000	4,590.00
5,000	100.00	40,000	5,800.00
6,000	140.00	45,000	7,140.00
7,000	210.00	50,000	8,600.00
8,000	300.00	60,000	11,900.00
9,000	390.00	70,000	15,700.00
10,000	480.00	80,000	20,000.00
12,000	680.00	90,000	24,800.00
14,000	900.00	100,000	30,100.00
16,000	1,140.00	150,000	58,100.00
18,000	1,400.00	200,000	86,600.00
20,000	1,680.00	300,000	144,600.00
22,000	2,000.00	500,000	263,600.00
24,000	2,340.00	1,000,000	571,100.00

To determine the tax of a single person (without dependents, dividends, or partially exempt interest), the total tax as shown in the above table should be increased by \$120 where the net income exceeds \$6,500. On smaller amounts the tax of such a person is as follows:

Net Income	Tax
\$1,000	None
2,000	\$ 40
3,000	80
4,000	120
5,000	160
6,000	240

TAX RATE COMPARISON TABLE

Individuals—Normal Income Tax		
	1928 Act	1932 Act
Personal exemptions		
Single	\$1,500	\$1,000
Family head or married	3,500	2,500
Tax rates	Per Cent	Per Cent
First \$4,000	1 ½	4
\$4,000 to \$8,000	3	8
Over \$8,000	5	8

Individuals—Surtaxes

	1928 Act Per Cent	1932 Act Per Cent
First \$6,000	None	None
\$6,000 to \$10,000	None	1
10,000 to 12,000	1	2
12,000 to 14,000	1	3
14,000 to 16,000	2	4
16,000 to 18,000	3	5
18,000 to 20,000	4	6
20,000 to 22,000	5	8
22,000 to 24,000	6	9
24,000 to 26,000	7	10
26,000 to 28,000	7	11
28,000 to 30,000	8	12
30,000 to 32,000	8	13
32,000 to 36,000	9	15
36,000 to 38,000	10	16
38,000 to 40,000	10	17
40,000 to 42,000	11	18
42,000 to 44,000	11	19
44,000 to 46,000	12	20
46,000 to 48,000	12	21
48,000 to 50,000	13	22
50,000 to 52,000	13	23
52,000 to 54,000	14	24
54,000 to 56,000	14	25
56,000 to 58,000	15	26
58,000 to 60,000	15	27
60,000 to 62,000	16	28
62,000 to 64,000	16	29
64,000 to 66,000	17	30
66,000 to 68,000	17	31
68,000 to 70,000	17	32
70,000 to 72,000	18	33
72,000 to 74,000	18	34
74,000 to 76,000	18	35
76,000 to 78,000	18	36
78,000 to 80,000	18	37
80,000 to 82,000	19	38
82,000 to 84,000	19	39
84,000 to 86,000	19	40
86,000 to 88,000	19	41
88,000 to 90,000	19	42
90,000 to 92,000	19	43
92,000 to 94,000	19	44
94,000 to 96,000	19	45
96,000 to 98,000	19	46
98,000 to 100,000	19	47
100,000 to 150,000	20	48
150,000 to 200,000	20	49
200,000 to 300,000	20	50
300,000 to 400,000	20	51
400,000 to 500,000	20	52
500,000 to 750,000	20	53
750,000 to 1,000,000	20	54
Over \$1,000,000	20	55

Corporation—Income Tax

	1928 Act	1932 Act,
Tax rate, per cent	12	13 $\frac{3}{4}$
Exemption	\$3,000	None
Extra tax on consolidated returns	None	$\frac{3}{4}$ %

Stamp Taxes

	1928 Act	1932 Act
Stock Transfers:		
Stock with par value	2c per \$100 or fraction thereof	4c per \$100 or fraction thereof
Stock without par value	2c per share	4c per share
(If selling price is \$20 or more the rates under Act of 1932 are 5c instead of 4c.)		
Bond transfers	None	4c per \$100
Stock Issue		
Stock with par value	5c per \$100 or fraction thereof	10c per \$100 or fraction thereof
Stock without par value	1c on each \$20 or frac- tion thereof	2c on each \$20 or frac- tion thereof
Bond issues	5c per \$100	10c per \$100
Conveyances	None	50c per \$500
Produce futures	1c per \$100	5c per \$100

TAX RATE COMPARISON TABLE—Continued

Excise Taxes		1928 Act	1932 Act
Lubricating oils	.....	None	4c a gal.
Automobiles—passenger	.....	None	3%
Automobiles—trucks	.....	None	2%
Automobile accessories ¹	.....	None	2%
Grape concentrates	.....	None	20c a gal.
If containing more than 35% of sugar by weight.			
Brewers Wort	.....		15c a gallon
Liquid malt; malt syrup	.....		3c per lb.
Note: Liquid malt containing less than 15 per centum of solids by weight shall be taxable as brewers wort.			
Malt syrups, liquid and extract	.....	None	3c a lb.
Chewing gum	.....	None	2%
Radios and phonograph records	.....	None	5%
Toilet preparations ²	.....	None	10%
Jewelry ³	.....	None	10%
Sporting goods	.....	None	10%
Cameras ⁴	.....	None	10%
Firearms, shells and cartridges	.....	None	10%
Mechanical refrigerators	.....	None	5%
Furs	.....	None	10%
Gasoline	.....	None	1c a gal.
Rubber tires	.....	None	2 ¼ c a lb.
Inner tubes	.....	None	4c a lb.
Wooden matches	.....	None	2c per M.
Paper matches in books	.....	None	½ of 1% per M.
Candy	.....	None	2%
Cereal beverages	.....	None	1 ¼ c a gal.
Unfermented grape juice	.....	None	5c a gal.
Fountain syrups	.....	None	6c a gal.
Syrups for bottled carbonated beverages	.....	None	5c a gal.
Natural or artificial mineral waters or table waters	.....	
@ over 12 ½ c per gal.	.....		2c per gallon
All still drinks ⁵	.....		2c per gallon
Carbonic acid gas	.....	None	4c a lb.

¹ Not including tires and tubes.

² Excluding soap, dentifrices and mouth washes, on which the rate is 5%.

³ Articles sold for \$3.00 or more; Watches, clocks, parts for watches or clocks sold for more than 9c each.

⁴ Weighing not more than 100 lbs.

⁵ Excluding cider.

Import Taxes

	1928 Act	1932 Act
Lubricating oils ⁶	None	4c a gal. ⁶
Crude petroleum and fuel oil	None	½ c a gal.
Gasoline	None	2 ½ c a gal.
Paraffin and other petroleum wax products	None	1c a lb.
Lumber	None	\$3 per M ft.
Coal, coke, and briquets	None	10c per cwt.
Copper	None	4c a lb.

Other Taxes

	1928 Act	1932 Act
Telegraph messages	None	5%
Telephone conversations, when charge is 50c or more	None	10 to 20c
Leased wire	None	5%
Radio and cable messages	None	10c flat
Postal rates		
(first class)	—	1c addtl.
Postal rates		
(second class)	—	increased
Oil Pipe lines—transportation	None	4%
Admissions ⁷	1c for each	10 cents or fraction thereof
Bank checks	None	2c
Safe deposit boxes	None	10%
Boats	None	license fee based on size
Electricity sales	None	3%

⁶ Imported lubricating oils are exempt from import tax.

⁷ 40c exemption.

GAME AND FISH LAWS

OPEN SEASON 1932-1933

FIRST AND LAST DAYS INCLUSIVE (See exceptions)

	ME.	N. H.	VT.	MASS.	R. I.	CONN.
Deer	See Note	See Note	See Note Nov. 21 to Nov. 30	See Note Dec. 5 to Dec. 10	See Note No Open Season	See Note No Open Season
Moose and Caribou	No Open Season	No Open Season	No Open Season	No Open Season		
Gray Squirrel	Oct. 1 to Oct. 31	No Open Season	Oct. 1 to Oct. 31	Oct. 20 to Nov. 20	Nov. 1 to Dec. 31	Oct. 20 to Nov. 23
Hare and Rabbit	See Note Oct. 1 to Mar. 31	Oct. 1 to Feb. 28	Oct. 1 to Feb. 28	See Note Oct. 20 to Feb. 15	Nov. 1 to Dec. 31	See Note Nov. 1 to Dec. 15
Partridge	Oct. 1 to Nov. 9	See Note Oct. 1 to Nov. 30	Oct. 1 to Oct. 31	See Note Oct. 20 to Nov. 20	See Note Nov. 1 to Dec. 31	See Note Oct. 20 to Nov. 23
Quail	No Open Season	Oct. 15 to Nov. 15	Sept. 15 to Nov. 30	See Note Oct. 20 to Nov. 20	Nov. 1 to Dec. 31	Close Season
Woodcock	Oct. 1 to Oct. 31	Oct. 1 to Oct. 31	Oct. 1 to Oct. 31	Oct. 20 to Nov. 19	Nov. 1 to Nov. 19	Oct. 20 to Nov. 19
Duck	Oct. 16 to Dec. 15	Oct. 16 to Dec. 15	Oct. 16 to Dec. 15	Oct. 16 to Dec. 15	Oct. 16 to Dec. 15	Oct. 16 to Dec. 15
Goose	Oct. 16 to Dec. 15	Oct. 16 to Dec. 15	Oct. 16 to Dec. 15	Oct. 16 to Dec. 15	Oct. 16 to Dec. 15	Oct. 16 to Dec. 15
Ruffed Grouse	Oct. 1 to Nov. 9	See Note Oct. 1 to Nov. 30	Oct. 1 to Oct. 31	See Note Oct. 20 to Nov. 20	Nov. 1 to Dec. 31	See Note Oct. 20 to Nov. 23
Brant	Oct. 16 to Dec. 15	Oct. 16 to Dec. 15	Oct. 16 to Dec. 15	Oct. 16 to Dec. 15	Oct. 16 to Dec. 15	Oct. 16 to Dec. 15
Wilson Snipe	Oct. 1 to Dec. 31	Oct. 1 to Dec. 31	Oct. 1 to Dec. 31	Oct. 1 to Dec. 31	Oct. 1 to Dec. 31	Oct. 1 to Dec. 31
Coot	Oct. 16 to Dec. 15	Oct. 16 to Dec. 15	Oct. 16 to Dec. 15	Oct. 16 to Dec. 15	Oct. 16 to Dec. 15	Oct. 16 to Dec. 15
Rail	Sept. 1 to Nov. 30	Sept. 1 to Nov. 30	Sept. 1 to Nov. 30	Oct. 1 to Dec. 15	Sept. 1 to Nov. 30	Sept. 1 to Nov. 30
Gallinule	Sept. 1 to Nov. 30	Sept. 16 to Dec. 31	Sept. 1 to Nov. 30	Oct. 1 to Dec. 15	Oct. 16 to Dec. 15	Sept. 1 to Nov. 30

The several States have authority to curtail the seasons and bag limits fixed by Federal regulations, but the Federal restrictions may not be exceeded. The Federal regulations are amended from time to time to meet changing conditions, and persons intending to hunt migratory game birds should therefore procure from the Biological Survey of the Department of Agriculture at Washington, copies of the latest regulations.

NOTES, EXCEPTIONS AND LICENSES

GAME LAWS

For other information, consult the Fish and Game Commissioner of each state. All dates inclusive.

These laws are in force when this Almanac goes to print, November, 1932, and have been substantiated by the Fish and Game Commissioner in each New England State.

MAINE

CARIBOU AND MOOSE, closed season.

DEER may be hunted in the northern county of Aroostook from Oct. 16 to Nov. 30, inclusive.

DEER may be hunted in the southern counties of Androscoggin, Cumberland, Kennebec, Knox, Lincoln, Sagadahoc, Waldo and York Counties from Nov. 1 to Nov. 30, inclusive.

DEER may be hunted in Hancock, Washington, Penobscot, Somerset, Piscataquis, Franklin and Oxford Counties from Nov. 1 to Dec. 15 inclusive.

HUNTING of wild animals is prohibited from an hour after sunset to an hour before sunrise, with the exception of skunks and raccoons.

HUNTING of wild birds is prohibited from sunset to half an hour before sunrise.

WILD HARES OR RABBITS, open season in the counties of Androscoggin, Sagadahoc, Cumberland and York from Oct. 1-Feb. 28.

HUNTING AND FISHING LICENSES: FEES. (1929, c. 331, sec. 16.)

Any resident and his immediate family may without license hunt on land owned by him, or leased by him and on which he is actually domiciled and which is used exclusively for agricultural purposes.

Resident hunting license costs sixty-five cents annually. Combination hunting and fishing license, for residents, costs one dollar and fifteen cents annually. Fishing license for residents 65c annually.

Non-resident hunting license, for wild birds, rabbits, raccoons, foxes and unprotected wild birds or wild animals only, costs five dollars and fifteen cents annually; for both wild birds and wild animals, fifteen dollars and fifteen cents annually. Non-resident fishing license \$5.15 for one year, \$3.15 for 30 days.

Failure to produce such license within a reasonable time when requested by any authorized person shall be prima facie evidence of the violation of law.

Hunting licenses shall not be issued to any non-resident under eighteen years of age unless the written consent of the parent or guardian is attached to the application, but any resident under sixteen years of age may hunt without a license, if accompanied at all times by parent or guardian.

NEW HAMPSHIRE

Governor and council may suspend open season in time of excessive drought or emergency.

DEER: Open season. Wild deer may be captured or taken after 5:00 a. m. and before 6:00 p. m. as follows: in the County of Coos, except in the towns of Dalton, Whitefield and Carroll from Oct. 15-Dec. 1; in the County of Grafton, and the towns of Dalton, Whitefield and Carroll, in the County of Coos from Nov. 1-Dec. 16; in the County of Carroll from Nov. 15-Dec. 16; in the County of Cheshire from Dec. 1-Dec. 16; in the County of Rockingham from Dec. 15-Jan. 1 and from all the other Counties in the State from Dec. 1-Jan. 1.

No person shall take more than one deer in one season. These provisions shall not apply to deer in private game reserves.

HUNTING AND FISHING LICENSES: Non-resident: Game and fish, \$15.15; fish, \$3.15. Resident: Game and fish, \$2.00. Resident soldiers and

sailors more than 70 years of age may obtain license free on application to fish and game commissioner. Fishing licenses not required of children under 16 or of blind persons. Issued by commissioner or his agent in each town, who, with few exceptions is the town clerk. Children under 16 may hunt without license when accompanied by licensed parent or guardian. Resident owner of farm lands and his minor children may hunt during open season on own land without license. Guide: Non-resident, \$20; resident, \$1. Issued by commissioner.

VERMONT

Landowner, member of his family, or authorized employee may kill deer doing damage to his fruit trees or crops; but person under whose direction a deer is so killed must, within 12 hours, report the matter in a signed statement to nearest fish and game warden. Deer may also be killed at any time in orchard zones established by commissioner, but such killing must forthwith be reported to owner of orchard and county warden.

DEER, one deer with horns not less than 3 inches long, Nov. 21–Nov. 30, open season., both dates inclusive excepting Sundays.

A person shall not take a wild deer in Franklin Co. at any time. Closed season on moose, elk, and caribou.

ENGLISH SNIPE, PLOVER (other than UPLAND PLOVER) and shore birds, Oct. 1 - Dec. 1, open season.

PHEASANTS, or EUROPEAN PARTRIDGE, UPLAND PLOVER and WOOD DUCK, no open season.

HUNTING AND FISHING LICENSES: Non-resident: Game and fish, \$10.50; fish, \$3.15. (Reciprocal.) Resident: Game and fish, \$1.50; game, \$1; fish, \$1. Issued by town clerks. Citizens of United States who own \$1,000 taxable property in Vermont pay same fees as resident. Alien resident who has not declared his intention, pays same fees as non-resident; declarant resident for six months in State pays same fees as resident.

Hunting licenses not issued to persons under 16 without written consent of parent or guardian. Owners of farm lands and their resident minor children or tenants may hunt without a license on own lands during open season. Fishing license not required of persons under 15.

MASSACHUSETTS

DEER: Open season Dec. 5–Dec. 10. No open season in Nantucket County. Daily closed season one-half hour after sunset to one-half hour before sunrise. No hunting dogs to be at large during open season on deer.

RUFFED GROUSE, open season Oct. 20–Nov. 20 inclusive.

QUAIL, Closed season in Essex, Hampden, Hampshire, Berkshire, Franklin, Middlesex, Nantucket and Worcester Counties. On Ruffed Grouse and Quail, director may reduce bag limit; suspend or modify season.

PHEASANTS, open season, Oct. 20–Nov. 20. (Closed in Dukes County.) Cocks only in Nantucket, Berkshire, Franklin and Hampshire.

HARES and RABBITS, open season: in Nantucket County Oct. 20 to last day of February.

EUROPEAN HARES may be killed in Berkshire County at any time.

LICENSES: Sporting license required for hunting and fishing in inland waters.

Citizen (resident for six months), sporting license \$2.75, trapping \$5.25. Non-residents, sporting \$10.25, trapping \$10.25. Alien, sporting \$15.25, trapping \$15.25. Trapping and fishing license to minors between 15–18 yrs. of age \$1.25 and written consent of parents.

Fees after January 1, 1933: Citizens, sporting, \$3.25; hunting, \$2.00; fishing, \$2.00. Minors and women, fishing, \$1.25; trapping, \$5.25. Minors, trapping, \$2.25. Non-resident Citizens, sporting, \$15.25; hunting, \$10.25; fishing, \$5.25; trapping, \$15.25.

RHODE ISLAND

No Open Season on Hungarian partridges. Swans, wood duck, curlew, willet, godwits, black breasted and golden plover, greater and lesser yellowlegs, and all the smaller shore birds except those for which open seasons are provided as above stated, are protected at all times under the Federal regulations.

New Shoreham Pheasants protected except first and third Wednesdays in November and first Wednesday in December. Limit two per day. Jamestown Pheasants protected except first and second Mondays in November. Limit two per day.

NOTE. It is a state offense to import live game birds or animals without first obtaining a permit from the Game Commissioner, or to send or carry out of the state partridge, quail, woodcock, wild ducks', wild swans, wild geese, rails, shore, marsh or beach birds.

HUNTING AND FISHING LICENSES: Nonresident: Game, \$10.00; fish, \$2.50. Alien: Game, \$15.00; fish, \$2.50, alien resident for 1 year; \$5, alien not resident for 1 year. Resident: Game, \$2.00; fish, \$1.25. Issued by city and town clerks. Fishing license not required of women, nor of males under 18. License not required of resident or his immediate family to hunt on own or leased agricultural lands on which actually domiciled; non-resident owning real estate valued at not less than \$500, and non-resident member or guest of club incorporated for hunting or fishing purposes prior to Jan. 1, 1909, which owns real estate assessed for taxation at value of not less than \$1,000, may procure license at a fee of \$2.25; licenses not issued to minors under 15. Consent of owner required for hunting upland game birds on land of another from January 1 to October 31. Migratory game birds may be taken only from one-half hour before sunrise to sunset.

CONNECTICUT

Governor may suspend *open seasons* during time of drought.

DEER: Owners of agricultural lands, member of family, or employee may kill deer with a shotgun or, under permit, with a rifle, at any time on such lands when deer are damaging fruit trees or growing crops, but such killing or wounding must be reported to the commissioners within 12 hours.

HARE, RABBIT (except European, Belgian, or German hare and jack rabbit, no closed season): Nov. 1-Dec. 15, open season.

PHEASANT (male only): Oct. 20-Nov. 23, open season.

No person shall kill any HUNGARIAN PARTRIDGE prior to Oct. 20, 1933.

Quail—Closed season, 1932.

HUNTING AND FISHING LICENSES: Non-resident: Game, \$10.35; Game and fish, \$14.35; fish, \$5.35. Resident citizen: Game, \$3.35; game and fish, \$5.35; fish, \$3.35.

Hunting license not issued to persons under 16, and fishing license not required of such persons. Resident and his children may hunt or fish during open season without license on land on which he is actually domiciled, if such land is not used for club, shooting, or fishing purposes. Licensee must report amount of game killed, and must wear license button on outer garment. Alien: Not permitted to hunt. Taxidermist, \$5.

Hunting license exceptions: Non-resident citizen owning improved real estate in Connecticut to the value of \$1,000 or more or any lineal descendant of such non-resident may procure a license for the same fee as a resident.

Fishing license—Non-residents residing in a state the non-resident fee of which is in excess of \$5.35, shall be charged the same fee in this state. Aliens or their lineal descendants owning real estate situated in the state assessed for the purpose of taxation in the amount of \$500 or more and non-residents or lineal descendants of same own-

ing improved real estate situated in the state assessed for the purpose of taxation in the amount of \$1,000 or more may procure a license for the same fee as a resident.

FISH LAWS.

MAINE

Open Season:

Lakes and Ponds

SALMON, LANDLOCKED SALMON, TROUT, AND TOGUE, from the time the ice is out of the lakes and ponds to Sept. 30. White Perch from June 21 to Sept. 29. Black Bass from June 21 to Sept. 30, except that not more than three black bass in one day may be caught by fly fishing from June 1 to June 20, inclusive.

Rivers Above Tide Waters

SALMON, LANDLOCKED SALMON, TROUT, AND TOGUE, from the time the ice is out of the river to Sept. 14. Black Bass from June 21 to Sept. 30, except that not more than 3 Black Bass in any one day may be caught by fly fishing from June 1 to June 20 inclusive. White Perch from June 21 to Sept. 14.

Brooks and Streams Above Tide Waters

SEA SALMON, from the time ice is out of brooks and streams to Sept. 14. LANDLOCKED SALMON from the time the ice is out of the brooks and streams to August 15.

WHITE PERCH, from June 21 to Sept. 14. TOGUE, from the time the ice is out of the brooks and streams to Sept. 30. BLACK BASS, from June 21 to Sept. 30, except that not more than three black bass in any one day may be caught by fly fishing from June 1 to June 20 inclusive. Minimum length of Landlocked Salmon 12 in., Trout or White Perch 6 in., Black Bass 10 in. Trout, ice out to August 15.

NEW HAMPSHIRE

Open Season:

BROOK, RAINBOW, BROWN TROUT, Coos, Carroll, and Grafton Counties, May 1 to Sept. 1. All other counties, Apr. 15 to Aug. 1. Limit—5 lbs. per day. Minimum length: ponds, 7 in., streams, 6 in. LAKE TROUT, Jan. 1 to Sept. 1. Limit—4 per day, minimum length 15 in. SALMON, Apr. 1 to Sept. 1. Limit—4 per day, minimum length 15 in. AUREOLUS TROUT, Apr. 15 to Sept. 1. Limit—4 per day, minimum length 12 in. BLACK BASS, July 1 to Jan. 1. Limit—10 lbs. per day, minimum length 9 in. With fly only from June 15 in Winnepesaukee, Sunapee, Asquam and Wentworth Lakes. PIKE PERCH, June 1 to March 1. Limit—none, minimum length 10 in. WHITE PERCH, June 1 to Nov. 1. Limit—10 lbs., minimum length 7 in. PICKEREL, June 1 to Jan. 16. Limit—10 lbs. per day, minimum length 12 in. SHAD, Winnepesaukee, Jan. 1 to June 15. Limit—12 per day. Winnepesaukee, Paugus Lake, June 15 to Oct. 1. 6 per day. HORNED POUT, June 15 to Nov. 1. Limit—40 per day. Can be taken anytime in waters in Coos County and Connecticut River. SMELT. Limit—10 lbs. per day. With a dipnet not over 48 in. in diameter.

VERMONT

Open Season: General Rule. Consult Fish Commissioner of State for exceptions.

BROOK TROUT, BROWN TROUT, LOCK LEVEN, STEELHEAD and RAINBOW TROUT, GREYLING or BLACK SPOTTED TROUT, May 1 to Aug. 15, not less than 6 in. long, not more than 25 fish or 5 lbs. GOLDEN TROUT, LAKE TROUT and LAND-LOCKED SALMON, May 1 to Sept. 1, not less than 15 in. long, not more than 10 lbs.

NOTE.—See General Laws for exceptions to above applying to Forest Lake, Big Averill Lake, Little Averill Lake, in Essex County; Wiloughby Lake, Orleans County and Lake Mitchell, Windsor County.

(It is illegal to take any of the fish enumerated above two hours after sunset and one hour before sunrise.)

BLACK BASS, not less than 10 in. long, not more than 10 fish, July 1 to Jan. 1. (Cannot be sold) MUSKALLONGE (except Lake Champlain), June 15 to Apr. 15. PIKE PERCH (WALL-EYED PIKE), not less than 10 in. long, not more than 25 lbs., May 1 to Mar. 1. PICKEREL, not less than 12 in. long, May 1 to Mar. 15.

Shooting and Spearing in *certain* waters March 15 to May 15. (Consult Fish Com.)

MASSACHUSETTS

General Rules, all dates inclusive. Open Season.

TROUT, Apr. 15 to July 31, 6 inches or more long, daily limit 15. Fishing prohibited 2 hours after sunset to 1 hour before sunrise. Deerfield River May 30 to Aug. 31, 12 inches or more in length, 5 Trout per person per day. Fish may be taken only with a single rod and line attached to be held in the hand.

SALMON, Apr. 15 to Nov. 30, 12 inches or more in length, 5 in a day.

PICKEREL, May 1 to Feb. 28, 12 inches or more long, 10 in a day. Pike Perch, May 1 to Feb. 28, 12 inches or more, 5 in a day. Muscallonge, May 1 to Jan. 31, 20 inches or more long.

WHITE PERCH, June 1 to Feb. 28, 7 inches, except in Dukes and Nantucket Counties. Horned Pout, June 15 to Feb. 28, 30 fish in 24 hours.

BLACK BASS, July 1 to Jan. 31, 10 inches or more long, 6 in a day.

Fish frequenting fresh water may be taken only by single hook attached to each line, except 3 flies may be used on each line. Limit 10 hooks.

RHODE ISLAND

Open Season: Dates inclusive. Consult Fish Commissioner of State for exceptions.

Consult Fish Commissioner of State concerning restrictions regarding seining.

BLACK BASS, June 20 to Feb. 20, 10 inches or more long, 8 in a day.

White Perch not less than 6 inches, daily limit 20. Yellow or

Striped Perch, 6 inches or more long, daily limit 30. Pickerel.

June 20 to Feb. 20, 10 inches or more long, daily limit 18. Trout,

Apr. 1 to July 15, 7 inches or more long, daily limit 20.

Fishing in fresh water restricted to lines operated by hand with not over 2 hooks upon each. *Through the ice*, 10 lines with a single hook upon each. Restricted to daylight hours and lines must be personally attended.

CONNECTICUT

Open Season: Dates inclusive. Consult Fish Commissioner of State for exceptions.

TROUT, other than lake trout, April 15th to June 30th, legal length 6 inches, limit 10 pounds in any one day or not more than 20 trout. Sale of trout prohibited.

LAKE TROUT from April 15 to August 31, legal length 10 inches. PICKEREL

from April 15 to Jan. 31, legal length 12 inches, bag limit 10. ALEWIVES

from Mar. 1 to May 31. BLACK BASS from July 1 to Oct. 31, legal

length 10 inches, bag limit 10. LAMPREY EELS, Mar. 1 to May 15.

STRIPED BASS shall not be taken in the inland waters except by

angling, legal length 12 in. PERCH, YELLOW and WHITE, legal length

7 in. Limit, a total of 30 of both kinds, except for ice fishing.

NOTE.—*The above is not a complete transcript of the Fish and Game Laws. It is intended merely as a concise statement of the provisions most likely to be of general interest.*

Consult Fish Warden of each county for exceptions.

POSTAL RATES.—DOMESTIC.

First Class Matter may be forwarded from one Post Office to another without additional postage, but other matter must have new postage.

LETTERS AND POSTAL CARDS.—FIRST CLASS.

Written and Typewritten Matter, each ounce and fraction..... .03
 Post Cards and Private Mailing Cards which comply with Departmental requirements01
 Business Reply Cards or Letters, consult Post Office.

NEWSPAPERS AND PERIODICALS—SECOND CLASS.

Entire Newspapers or Magazines when mailed by the public; for each two ounces or fraction, regardless of distance or weight..... .01
 Fourth class rate applies when it is lower than second class.

MERCHANDISE AND MISCELLANEOUS.—THIRD CLASS. (Limit of weight 8 ounces.)

Merchandise, incomplete copies of newspapers, printed and other mailable matter, each 2 ounces or fraction..... .015
 Books, catalogues (must be of 24 or more pages and substantially bound, with at least 22 pages printed, seeds, cuttings, bulbs, roots, scions and plants, 2 ounces or fraction..... .01
 Plain Printed Cards containing no writing other than the address, and not conforming with regulation size of Post Card, shall be considered Third Class and mailed for015
 Permit Mail. Envelopes, folders, etc., which are to be mailed under Third Class permit privileges should indicate the amount of postage paid.
 Bulk Mailings. Applications for bulk mailing privilege should be submitted to the Post Office.

PARCEL POST.—FOURTH CLASS.

(For Zone consult Post Office)

Everything over 8 ounces, including books and printed matter, except First Class and newspapers and other periodicals entered as Second Class matter mailed by the publishers or the public:—

Table of fourth-class or parcel-post rates effective October 1, 1932

ZONES

Weight in pounds	Local	1st	2d	3d	4th	5th	6th	7th	8th
		Up to 50 miles	50 to 150 miles	150 to 300 miles	300 to 600 miles	600 to 1,000 miles	1,000 to 1,400 miles	1,400 to 1,800 miles	Over 1,800 miles
1	\$0.07	\$0.08	\$0.08	\$0.09	\$0.10	\$0.11	\$0.12	\$0.14	\$0.15
2	.08	.10	.10	.11	.14	.17	.19	.23	.26
3	.08	.11	.11	.13	.17	.22	.26	.32	.37
4	.09	.12	.12	.15	.21	.27	.33	.41	.48
5	.09	.13	.13	.17	.24	.33	.40	.50	.59
6	.10	.14	.14	.19	.28	.38	.47	.59	.70
7	.10	.15	.15	.21	.31	.43	.54	.68	.81
8	.11	.16	.16	.23	.35	.49	.61	.77	.92
9	.11	.17	.17	.25	.38	.54	.68	.86	1.03
10	.12	.18	.18	.27	.42	.59	.75	.95	1.14
11	.12	.19	.19	.29	.45	.64	.82	1.04	1.25
12	.13	.21	.21	.31	.49	.70	.89	1.13	1.36
13	.13	.22	.22	.33	.52	.75	.96	1.22	1.47
14	.14	.23	.23	.35	.56	.80	1.03	1.31	1.58
15	.14	.24	.24	.37	.59	.86	1.10	1.40	1.69
16	.15	.25	.25	.39	.63	.91	1.17	1.49	1.80
17	.15	.26	.26	.41	.66	.96	1.24	1.58	1.91
18	.16	.27	.27	.43	.70	1.02	1.31	1.67	2.02
19	.16	.28	.28	.45	.73	1.07	1.38	1.76	2.13
20	.17	.29	.29	.47	.77	1.12	1.45	1.85	2.24
21	.17	.30	.30	.49	.80	1.17	1.52	1.94	2.35
22	.18	.32	.32	.51	.84	1.23	1.59	2.03	2.46
23	.18	.33	.33	.53	.87	1.28	1.66	2.12	2.57
24	.19	.34	.34	.55	.91	1.33	1.73	2.21	2.68
25	.19	.35	.35	.57	.94	1.39	1.80	2.30	2.79
26	.20	.36	.36	.59	.98	1.44	1.87	2.39	2.90
27	.20	.37	.37	.61	1.01	1.49	1.94	2.48	3.01
28	.21	.38	.38	.63	1.05	1.55	2.01	2.57	3.12
29	.21	.39	.39	.65	1.08	1.60	2.08	2.66	3.23
30	.22	.40	.40	.67	1.12	1.65	2.15	2.75	3.34
31	.22	.41	.41	.69	1.15	1.70	2.22	2.84	3.45
32	.23	.43	.43	.71	1.19	1.76	2.29	2.93	3.56
33	.23	.44	.44	.73	1.22	1.81	2.36	3.02	3.67
34	.24	.45	.45	.75	1.26	1.86	2.43	3.11	3.78
35	.24	.46	.46	.77	1.29	1.92	2.50	3.20	3.89
36	.25	.47	.47	.79	1.33	1.97	2.57	3.29	4.00
37	.25	.48	.48	.81	1.36	2.02	2.64	3.38	4.11
38	.26	.49	.49	.83	1.40	2.08	2.71	3.47	4.22
39	.26	.50	.50	.85	1.43	2.13	2.78	3.56	4.33
40	.27	.51	.51	.87	1.47	2.18	2.85	3.65	4.44
41	.27	.52	.52	.89	1.50	2.23	2.92	3.74	4.55
42	.28	.54	.54	.91	1.54	2.29	2.99	3.83	4.66
43	.28	.55	.55	.93	1.57	2.34	3.06	3.92	4.77
44	.29	.56	.56	.95	1.61	2.39	3.13	4.01	4.88

Weight in pounds	Local	ZONES							
		1st Up to 50 miles	2d 50 to 150 miles	3d 150 to 300 miles	4th 300 to 600 miles	5th 600 to 1,000 miles	6th 1,000 to 1,400 miles	7th 1,400 to 1,800 miles	8th Over 1,800 miles
45	.29	.57	.57	.97	1.64	2.45	3.20	4.10	4.99
46	.30	.58	.58	.99	1.68	2.50	3.27	4.19	5.10
47	.30	.59	.59	1.01	1.71	2.55	3.34	4.28	5.21
48	.31	.60	.60	1.03	1.75	2.61	3.41	4.37	5.32
49	.31	.61	.61	1.05	1.78	2.66	3.48	4.46	5.43
50	.32	.62	.62	1.07	1.82	2.71	3.55	4.55	5.54
51	.32	.63	.63	1.09	1.85	2.76	3.62	4.64	5.65
52	.33	.65	.65	1.11	1.89	2.82	3.69	4.73	5.76
53	.33	.66	.66	1.13	1.92	2.87	3.76	4.82	5.87
54	.34	.67	.67	1.15	1.96	2.92	3.83	4.91	5.98
55	.34	.68	.68	1.17	1.99	2.98	3.90	5.00	6.09
56	.35	.69	.69	1.19	2.03	3.03	3.97	5.09	6.20
57	.35	.70	.70	1.21	2.06	3.08	4.04	5.18	6.31
58	.36	.71	.71	1.23	2.10	3.14	4.11	5.27	6.42
59	.36	.72	.72	1.25	2.13	3.19	4.18	5.36	6.53
60	.37	.73	.73	1.27	2.17	3.24	4.25	5.45	6.64
61	.37	.74	.74	1.29	2.20	3.29	4.32	5.54	6.75
62	.38	.76	.76	1.31	2.24	3.35	4.39	5.63	6.86
63	.38	.77	.77	1.33	2.27	3.40	4.46	5.72	6.97
64	.39	.78	.78	1.35	2.31	3.45	4.53	5.81	7.08
65	.39	.79	.79	1.37	2.34	3.51	4.60	5.90	7.19
66	.40	.80	.80	1.39	2.38	3.56	4.67	5.99	7.30
67	.40	.81	.81	1.41	2.41	3.61	4.74	6.08	7.41
68	.41	.82	.82	1.43	2.45	3.67	4.81	6.17	7.52
69	.41	.83	.83	1.45	2.48	3.72	4.88	6.26	7.63
70	.42	.84	.84	1.47	2.52	3.77	4.95	6.35	7.74

EXCEPTIONS

(a) In the first or second zone, where the distance by the shortest regular practicable mail route is 300 miles or more, the rate is 9 cents for the first pound and 2 cents for each additional pound.

(b) On parcels collected on rural routes the postage is 2 cents less per parcel than shown in the foregoing table when for local delivery and 3 cents less per parcel when for other than local delivery.

(c) Parcels weighing less than 10 pounds measuring over 84 inches, but not more than 100 inches in length and girth combined, are subject to a minimum charge equal to that for a 10-pound parcel for the zone to which addressed.

Limit of size for parcels is 100 inches in length and girth combined. Limit of weight is 70 pounds in all zones.

Library Books. A special rate is allowed under certain conditions. (Inquire at Post Office as to requirements.)

SPECIAL HANDLING.

Parcels will receive first-class handling if, in addition to regular postage, there is added—

2 lbs. or less .....	.10
Over 2 lbs. and not more than 10 lbs. ....	.15
Over 10 lbs. ....	.20

SPECIAL HANDLING WITH SPECIAL DELIVERY.

Parcels of fourth-class matter will be given the same expeditious handling and transportation as is accorded first-class matter, and also special delivery at the office of address, upon prepayment of the following charge in addition to the regular postage: Up to 2 pounds 15 cents; over 2 pounds up to 10 pounds 25 cents; over 10 pounds 35 cents.

REGISTERED MAIL.

Not to exceed \$5	\$.15	Not to exceed \$500	\$.70
Not to exceed 25 .....	.18	Not to exceed 600 .....	.80
Not to exceed 50 .....	.20	Not to exceed 700 .....	.85
Not to exceed 75 .....	.25	Not to exceed 800 .....	.90
Not to exceed 100 .....	.30	Not to exceed 900 .....	.95
Not to exceed 200 .....	.40	Not to exceed 1000	1.00
Not to exceed 300 .....	.50		
Not to exceed 400 .....	.60		

POSTAL MONEY ORDERS.

For Orders		For Orders	
From \$0.01 to \$2.50....	6 cents	From \$20.01 to \$40.00....	15 cents
From \$2.51 to \$5.00....	8 cents	From \$40.01 to \$60.00....	18 cents
From \$5.01 to \$10.00....	11 cents	From \$60.01 to \$80.00....	20 cents
From \$10.01 to \$20.00....	13 cents	From \$80.01 to \$100.00....	22 cents

POSTAL RATES.—FOREIGN

Letters.—For the places in the following list the postal rate is **3 cents** each ounce or fraction. For all other foreign destinations, **5 cents** first ounce and **3 cents** each additional ounce or fraction: **Andorra (Republic), Argentina, Balearic Islands, Bolivia, Brazil, Canada, Canary Islands, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, Guatemala, Haiti, Honduras (Republic), Labrador, Mexico, Newfoundland, Nicaragua, Panama, Paraguay, Peru, Salvador, El; Spain, including Albuernas Island, Ceuta, Chafarinas or Zafarani Islands, Melilla, Penon de Velez de la Gomera, and Tangier. Uruguay, Venezuela,**

Post Cards. Single post cards for places enumerated above 2 cents; maximum size $6 \times 4 \frac{1}{4}$ inches, minimum size $4 \times 2 \frac{3}{4}$ inches. Single post cards for all other foreign destinations 3 cents.

Printed Matter, $1 \frac{1}{2}$ cents for each two ounces or fraction. Limit of weight 4 lbs., 6 oz., in general.

Samples of merchandise.—For all foreign destinations, $1 \frac{1}{2}$ cents each 2 ounces or fraction, with a minimum charge of 3 cents. Limit of weight: 18 ounces. Maximum dimensions: 18 inches in length, 8 inches in width, and 4 inches in thickness, except when in the form of a roll they are 18 by 6 inches.

Commercial papers.—For all foreign destinations, $1 \frac{1}{2}$ cents each 2 ounces or fraction, with a minimum charge of 5 cents. Limit of weight and maximum dimensions: Same as for printed matter.

Merchandise. Packages of merchandise, to the countries enumerated above, weighing 8 ounces or less 2 cents for each 2 ounces or fraction thereof, except in the case of merchandise consisting of seeds, scions, plants, cuttings, bulbs and roots for which the charge is $1 \frac{1}{2}$ cents each 2 ounces or fraction thereof. (This is not parcel post and must not have a customs declaration attached.)

Registration fee.—For all foreign destinations, 15 cents in addition to postage. When a return receipt is requested at the time of mailing, there is an additional charge of 5 cents therefor, and a charge of 10 cents when requested after mailing.

INTERNATIONAL PARCEL POST.

Countries.—Packages of mailable merchandise may be transmitted by parcel post to practically all countries.

At the present time C.O.D. service is restricted to parcels exchanged with Mexico, Germany, Sweden and Finland.

Allowable Dimensions (general).—Greatest length, $3 \frac{1}{2}$ feet; greatest length and girth combined, 6 feet, except to certain countries, information concerning which may be obtained from the Official Postal Guide.

Small Packets. (New class of mail) July 1, 1930.

Consult Post Office

POSTAL MONEY ORDERS.—INTERNATIONAL.

Limit of a Single Order, \$100.

For Orders from—

\$0.01 to	\$10.....	10 cents
From \$10.01 to	\$20.....	20 cents
From \$20.01 to	\$30.....	30 cents
From \$30.01 to	\$40.....	40 cents
From \$40.01 to	\$50.....	50 cents
From \$50.01 to	\$60.....	60 cents
From \$60.01 to	\$70.....	70 cents
From \$70.01 to	\$80.....	80 cents
From \$80.01 to	\$90.....	90 cents
From \$90.01 to	\$100.....	1 dollar

AIR MAIL SERVICE.

8 cents for first ounce, 13 cents second ounce and each succeeding ounce, to any part of the United States. This same rate applies to Canada, Cuba, Newfoundland, Mexico, and The Bahamas.

STATE AGRICULTURAL EXPERIMENT STATIONS AND COUNTY AGENTS.

MAINE

Location Orono
 Director of Station.....Dr. Fred Griffee
 Director of Extension Service
 Arthur L. Deering
 County Agents.....Leader, George Lord
 Androscoggin & Sagadahoc, L. Eastman
 —Auburn
 Aroostook, Verne C. Beverly. Richard
 C. Dolloff, Asst.—Presque Isle
 Cumberland, W. S. Rowe—Portland
 Franklin, Ralph Corbett—Farmington
 Hancock, Gardner Tibbetts—Ellsworth
 Kennebec, C. A. Day—Augusta
 Knox-Lincoln, R. C. Wentworth—Rock-
 land
 Oxford, Donald H. Ridley—South Paris
 Penobscot, M. S. Smith—Bangor
 Piscataquis, Oscar Wyman—Dover-Fox-
 croft
 Somerset, G. C. Dunn—Skowhegan
 Waldo, N. S. Donahue—Belfast
 Washington, R. W. Hobson—Machias
 York, R. H. Lovejoy—Sanford

NEW HAMPSHIRE

Location Durham
 Director of Station.....J. C. Kendall
 Director of Extension Service
 J. C. Kendall
 County Agents:
 Belknap, Royal W. Smith—Laconia
 Carroll, Errol C. Perry—Conway
 Cheshire, W. Leon Funkhouser—Keene
 Coos, D. A. O'Brien—Lancaster
 Grafton, W. Ross Wilson—Woodsville
 Hillsboro, E. W. Pierce—Milford
 Merrimack, E. W. Holden—Concord
 Rockingham, J. A. Purington—Exeter
 Strafford, E. A. Adams—Rochester
 Sullivan, H. N. Wells—Claremont

VERMONT

Location Burlington
 Director of Station
 J. E. Carrigan, Acting Director
 Director of Extension Service
 J. E. Carrigan
 County Agents.....Leader, H. W. Soule.
 Addison, R. O. Randall—Middlebury
 Bennington, J. A. McKee—Bennington
 Caledonia, W. A. Dodge—St. Johnsbury
 Chittenden, G. R. Ware—Burlington
 Franklin, Ralph Caldwell McWilliams,
 —St. Albans
 Grande Isle, S. C. Painter—North Hero
 Lamoille, F. D. Jones—Morrisville
 Orange, F. M. Small—Chelsea
 Orleans, J. L. MacDermid—Newport
 Rutland, T. D. Cook—Rutland
 Washington, Hjalmar Alfred Aronson,
 —Montpellier

Windham, Edmund Morton Root—Brat-
 tleboro
 Windsor, Clarence Rann Carlton—White
 River Junction

MASSACHUSETTS

Location Amherst
 Director of Station.. Fred J. Sievers
 Director of Extension Service
 Willard A. Munson
 County Agents:
 Barnstable, B. Tomlinson—Barnstable
 Berkshire, H. J. Talmage—Pittsfield
 Bristol, Warren L. Ide—Segreganset
 Dukes, E. E. Ekberg—Vineyard Haven
 Essex, Francis C. Smith—Hathorne
 Franklin, Joseph H. Putnam—Greenfield
 Hampden, Wilbur T. Locke.
 —West Springfield
 Hampshire, A. S. Leland—Northampton
 Middlesex, A. F. MacDougall—Concord
 Norfolk, Earl M. Ricker—Walpole
 Plymouth, James W. Dayton, Brockton
 Worcester, G. F. E. Story—Worcester.

RHODE ISLAND

Location Kingston
 Director of Station.....Basil E. Gilbert
 Director of Extension Service
 G. E. Adams
 County Agents:
 Eastern Rhode Island, S. D. Hollis—
 Newport
 Northern Rhode Island, W. H. Wood—
 Providence
 Southern Rhode Island, Ralph S. Shaw
 —East Greenwich

CONNECTICUT

Location Storrs and New Haven
 Director of Stations.....W. L. Slate
 Director of Extension Service
 Benjamin W. Ellis
 County Agents:
 Fairfield, LeRoy M. Chapman—Danbury
 Hartford, Charles D. Lewis—Hartford
 Litchfield, Raymond P. Atherton—Litch-
 field
 Middlesex, Philip F. Dean—Middletown
 New Haven, Raymond K. Clapp—New
 Haven.
 New London, Walter T. Clark—Norwich
 Tolland, Ernest E. Tucker—Rockville
 Windham, Raymond E. Wing—Putnam

COLLEGES, PROFESSIONAL AND NORMAL SCHOOLS IN NEW ENGLAND.

MAINE

Bates College—Lewiston
Bowdoin College—Brunswick
Colby College—Waterville
University of Maine—Orono
State Normal School—Castine
State Normal School—Farmington
State Normal School—Fort Kent
State Normal School—Gorham
State Normal School—Machias
State Normal School—Presque Isle
Theological Seminary—Bangor

Junior Colleges

Nasson Institute—Springvale
Ricker Classical Institute and Junior College—Houlton
Westbrook Seminary and Junior College—Portland

NEW HAMPSHIRE

Dartmouth College—Hanover
(Including Medical, Tuck School of Administration and Finance and Thayer School of Civil Engineering.)
University of New Hampshire—Durham
St. Anselm's College—Manchester
State Normal Schools—Keene
State Normal Schools—Plymouth

VERMONT

Bennington College—Bennington
Middlebury College—Middlebury
Norwich University—Northfield
St. Michael's College—Winooski Park
State Normal Schools—Castleton
State Normal Schools—Johnson
State Normal School—Lyndon Ctr.
Trinity College, Inc.—Burlington
University of Vermont and State Agricultural College—Burlington
Vermont State School of Agriculture—Randolph Center

MASSACHUSETTS

American International College—Springfield
Amherst College—Amherst
Andover Theological Seminary—Cambridge
Assumption College of Worcester—Worcester
Atlantic Union College—Lancaster
Boston College—Chestnut Hill
Boston Ecclesiastical Seminary (St. John's)—Brighton
Boston University—Boston
Clark University—Worcester
College of the Holy Cross—Worcester
College of Our Lady of the Elms—Chicopee
College of Physicians and Surgeons—Boston
Eastern Nazarene College—Wollaston
Emerson College of Oratory—Boston
Emmanuel College—Boston
Episcopal Theological Seminary—Cambridge
Gordons College of Theology and Missions—Boston
Harvard University—Cambridge
Hebrew Teachers' College—Boston
International Y.M.C.A. College—Springfield
Jackson College—Medford
Lowell Textile School—Lowell
Massachusetts State College—Amherst
Massachusetts College of Osteopathy—Boston

Massachusetts College of Pharmacy—Boston

Massachusetts Department of Education:
State Teachers' College—Bridgewater
State Teachers' College—Fitchburg
State Teachers' College—Framingham
State Teachers' College—Lowell
State Teachers' College—Salem
State Teachers' College—Worcester
Massachusetts School of Art—Boston
Massachusetts Institute of Technology—Cambridge

Middlesex College of Medicine and Surgery—Cambridge

Mount Holyoke College—South Hadley
New England Conservatory of Music—Boston

Northeastern University—Boston
Portia Law School—Boston
Radcliffe College—Cambridge
Regis College for Women (The)—Newton and Weston

Simmons College—Boston
Smith College—Northampton
Suffolk Law School—Boston
The Teachers College of the City of Boston—Boston

The Newton Theological Institution—Newton

Tufts College—Medford
Wellesley College—Wellesley
Wheaton College—Norton
Williams College—Williamstown
Worcester Polytechnic Institute—Worcester

RHODE ISLAND

Rhode Island State College—Kingston
Rhode Island College of Education—Providence
Brown University—Providence
(Including Pembroke College for Women.)
Providence College—Providence
Rhode Island College of Pharmacy and Allied Sciences—Providence
Rhode Island School of Design—Providence
Bryant Stratton College—Providence
New England College of Podiatry—Providence

CONNECTICUT

Albertus Magnus College—New Haven
Berkeley Divinity School—Middletown (Episcopal)
City Normal School—Bridgeport
Connecticut Agricultural College—Storrs
Connecticut College for Women—New London
Hartford Seminary Foundation—Hartford (Interdenominational)
Hartford Theological Seminary—Hartford (Ortho. Cong.)
State Normal School—Danbury
State Normal School—New Britain
State Normal School—New Haven
State Normal School—Willimantie
Trinity College—Hartford
Wesleyan University—Middletown
Yale University—New Haven
(Academic, Fine Arts, Forestry, Law, Medical, Music, Scientific and Theological Departments.)

RADIO STATIONS OF NEW ENGLAND.

State & City	Call Letter	Licensee, studio and transmitter location	Power	Frequency
Connecticut				
Bridgeport	WICC	Bridgeport Broadcasting Station, Inc., Bridgeport, Conn.	(250 w) (500 w LS)	600
Hartford	WDRC	WDRC, Inc., Hartford, Conn.	500 w	1330
Hartford	WTIC	WTIC, Travelers Broadcasting Service Corp., Hartford, Conn.	50 kw	1060
Storrs	WCAC	Connecticut Agricultural College, Storrs, Conn.	250 w	600
Maine				
Augusta	WRDO	WRDO, Inc., Augusta, Me.	100 w	1370
Bangor	WABI	First Universalist Society of Bangor Maine	100 w	1200
Bangor	WLBZ	Maine Brdcastg. Co., Inc., Bangor, Me.	500 w	620
Portland	WCSH	Congress Square Hotel Co., Portland, Maine	1 kw	940
Presque Isle . .	WAGM	Aroostook Brdcastg. Corp., Presque Isle, Me.	100 w	1420
Massachusetts				
Boston	WAAB	Bay State Brdcastg Corp., Boston, Mass.	500 w	1410
Boston	WBZ	Westinghouse Electric & Mfg. Co., Boston, Mass.	25 kw ⁴	990
Boston	WEEI	Edison Electric Illuminating Co., Boston, Mass.	1 kw	590
Boston	WHDH	Matheson Radio Co., Inc., Boston, Mass.	1 kw (LT)	830
Boston	WLOE	Boston Brdcastg. Co., Boston	(100 w) (250 w LS)	1500
Boston	WNAC	Shepard Brdcastg. Service, Inc., Boston, Mass.	1 kw	1230
Fall River	WSAR	Doughty & Welch Electric Co., Inc., Fall River, Mass.	250 w	1450
Lexington	WLEY	Carl S. Wheeler, trading as Lexington Air Station, Lexington, Mass.	(100 w) (250 w LS)	1370
Needham	WBSO	Broadcasting Service Organization, Inc., Needham, Mass.	500 w (D)	920
New Bedford . .	WNBH	Irving Vermilya, trading as New Bedford Brdcastg. Co., New Bedford, Mass.	100 w (250 LS)	1310
Springfield . . .	WBZA	Westinghouse Electric & Mfg. Co., Boston, Mass.	1 kw	990
Worcester	WORC	Alfred Frank Kleindienst, Worcester, Mass.	100 w	1200
Worcester	WTAG	Worcester Telegram Publishing Co., Inc., Worcester, Mass.	250 w	580
New Hampshire				
Laconia	WKAV	Laconia Radio Club, Laconia, N.H.	100 w	1310
Manchester . . .	WFEA ²	N. H. Broadcasting Co., Manchester, N. H.	500 w	1430
Portsmouth . .	WHEB	Granite State Broadcasting Co.	250 w (D)	740
Rhode Island				
Newport	WMBA	Leroy Joseph Beebe, Newport, R. I.	100 w	1500
Providence . . .	WEAN	Shepard Broadcasting Service, Inc., Providence, R. I.	(250 w) (500 w LS)	780
Providence . . .	WJAR	The Outlet Co., Providence, R. I.	(250 w) (500 w LS)	890
Providence . . .	WPRO	Cherry & Wehb Broadcasting Co., Providence, R. I.	100 w	1210
Vermont				
Burlington . . .	WCAX	Burlington Daily News, Inc., Burlington, Vt.	100 w	1200
Rutland	WSYB	Philip Weiss Music Co., Rutland, Vt.	100 w (250 (D))	1500
St. Alhans . . .	WQDM	A. J. St. Antoine, St. Alhans, Vt.	100 w (D)	1370
Springfield . . .	WNBX	WNBX Broadcasting Corp. Springfield, Vt.	250 (D)	1260
Waterbury . . .	WDEV	Harry C. Whitehill, Waterbury, Vt.	500 w (D)	550

D—Day time; LS—Local sunset; LT—Limited time.

COURTS IN NEW ENGLAND

Below are given the names of the places where the different Court Records are kept in the custody of the Clerks of Court, Registers of Probate or other such officers.

United States—First and Second Circuits.

FIRST CIRCUIT. Circuit Court of Appeals at Boston;—District Court of Maine at Portland;—of Massachusetts at Boston;—of New Hampshire at Concord;—of Rhode Island at Providence.

SECOND CIRCUIT. Circuit of Appeals at New York City;—District Court of Vermont at Burlington;—of Connecticut at New Haven;—Northern District of New York at Utica;—Eastern District of New York at Brooklyn;—Southern District of New York at New York City;—Western District of New York at Buffalo.

Maine.

The Supreme Judicial Court holds eight Law Terms, five at Augusta and three at Portland. This is the Court of last resort. It also meets in several counties for Equity and other matters as occasion requires. The Superior Court which is a Circuit Court holds terms in the sixteen counties of the State, terms comprising a minimum of two in Lincoln and Piscataquis, and a maximum of ten in Cumberland County.

Superior Court convenes in the following places: Androscoggin County at Auburn, Aroostook County at Houlton or Caribou, Cumberland County at Portland, Franklin County at Farmington, Hancock County at Ellsworth, Kennebec County at Augusta or Waterville, Knox County at Rockland, Lincoln County at Wiscasset, Oxford County at South Paris or Rumford, Penobscot County at Bangor, Piscataquis County at Dover-Foxcroft, Sagadahoc County at Bath, Somerset County at Skowhegan, Waldo County at Belfast, Washington County at Machias or Calais, and York County at Alfred.

Superior Court is a trial court. Clerks of the Supreme Judicial Courts in the several counties are also Clerks of the Superior Court.

Probate Courts are County Courts and meet in the County seat of each county.

New Hampshire.

Supreme Court at Concord;—Superior Court and Probate Courts:—Rockingham Co. at Exeter;—Strafford Co. at Dover;—Belknap Co. at Laconia;—Carroll Co. at Ossipee;—Merrimaack Co. at Concord;—Hillsborough Co. at Nashua and Manchester;—Cheshire Co. at Keene;—Sullivan Co. at Newport;—Grafton Co. at Woodsville;—Coos Co. at Lancaster.

Vermont.

Supreme Court, County Court and Court of Chancery:—Addison Co. at Middlebury;—Bennington Co. at Bennington;—Caledonia Co. at St. Johnsbury;—Chittenden Co. at Burlington;—Essex Co. at Guildhall;—Franklin Co. at St. Albans;—Grand Isle Co. at North Hero;—Lamoille Co. at Hyde Park;—Orange Co. at Chelsea;—Orleans Co. at Newport;—Rutland Co. at Rutland;—Washington Co. at Montpelier;—Windham Co. at Brattleboro;—Windsor Co. at Woodstock. Probate Courts:—Where the Probate District consists of an entire County its records are in the same places above. Other Probate records as follows:—Addison Dist. at Middlebury;—New Haven Dist. at Vergennes;—Bennington Dist. at Bennington;—Manchester Dist. at Manchester;—Bradford Dist. at Wells River;—Randolph Dist. at Chelsea;—Rutland Dist. at Rutland;—Fairhaven Dist. at Castleton;—Marlboro Dist. at Brattleboro;—Westminster Dist. at Bellows Falls;—Windsor Dist. at Ludlow;—Hartford Dist. at Woodstock. The records of each Probate District are in the custody of its Judge of Probate.

Massachusetts.

Supreme Judicial Court for the Commonwealth at Boston. Supreme Judicial Court, Superior Court, and Probate Courts:—Barnstable Co. at Barnstable;—Berkshire Co. at Pittsfield;—Bristol Co. at Taunton;—Dukes Co. at Edgartown, (see below);—Essex Co. at Salem;—Franklin Co. at Greenfield;—Hampden Co. at Springfield;—Hampshire Co. at Northampton;—Middlesex Co. at Cambridge;—Nantucket Co. at Nantucket, (see below);—Norfolk Co. at Dedham;—Plymouth Co. at Plymouth;—Suffolk Co. at Boston;—Worcester Co. at Worcester;—except that the records of the Supreme Judicial Court in cases arising in the Counties of Dukes County and Nantucket are at Taunton. Land Court at Boston.

Rhode Island.

Supreme Court at Providence. Superior Court:—Providence and Bristol Counties at Providence;—Kent Co. at East Greenwich;—Washington Co. at South Kingstown;—Newport Co. at Newport. In each City and Town there is a Court having Probate jurisdiction within its limits. In towns which have not elected a Judge of Probate the Town Councils act as Probate Courts.

Connecticut.

Supreme Court of Errors:—All sessions at Hartford. Superior Court:—Hartford Co. at Hartford; and at Danbury (at Bridgeport and Danbury);—New Haven Co. at New Haven and Waterbury;—Fairfield Co. at Bridgeport;—New London Co. at Norwich;—Litchfield Co. at Winsted;—Middlesex Co. at Middletown;—Windham Co. at Putnam;—Tolland Co. at Rockville. Courts of Common Pleas for such Counties as have these Courts are as follows:—Hartford Co. at Hartford;—New Haven Co. at New Haven;—Fairfield Co. at Bridgeport;—New London Co. at Norwich;—Litchfield Co. at Litchfield and Common Pleas Court, for Waterbury Judicial District. There are 113 Probate Districts;—84 of these Districts consist of one town only; each of the remaining Districts comprises more than one town. The records of each District are in the custody of its Judge of Probate.

STATE ELECTIONS IN NEW ENGLAND.

In all the New England States, Legislatures and Governors are now elected every second year. The next elections will be in 1934. All these elections are on the Tuesday next after the first Monday in November, except that in Maine, which is on the second Monday in September.

LEGISLATURES IN NEW ENGLAND.

SESSIONS COMMENCE AS FOLLOWS :

Maine. First Wednesday of January, 1933, and each alternate year.

New Hampshire. First Wednesday of January, 1933, and each alternate year.

Vermont. Wednesday after the first Monday of January, 1933, and each alternate year.

Massachusetts. First Wednesday of January, each year.

Rhode Island. First Tuesday of January, each year.

Connecticut. Wednesday after the first Monday of January, 1933, and each alternate year.

HOLIDAYS IN NEW ENGLAND.

The following days are legal Holidays. If the day falls on Sunday the day following is usually kept as a Holiday. Thanksgiving and Fast are appointed by State or National authority.

Maine. Feb. 22, Apr. 19, May 30, July 4, 1st Mon. Sept., Nov. 11, Thanksgiving and Christmas. Jan. 1 is a Bank and School Holiday but not a Legal Holiday.
New Hampshire. Jan. 1, Feb. 22, Fast, May 30, July 4, 1st Mon. Sept., Oct. 12, Nov. Election Day, Nov. 11, Thanksgiving and Christmas. **Vermont.** Jan. 1, Feb. 22, May 30, July 4, Aug. 16, 1st Mon. Sept., Oct. 12, Nov. 11, Thanksgiving and Christmas. **Massachusetts.** Jan. 1, Feb. 22, Apr. 19, May 30, July 4, 1st Mon. Sept. Oct. 12, Nov. 11, Thanksgiving and Christmas. **Rhode Island.** Jan. 1, Feb. 22, 2d Fri. May, May 30, July 4, 1st Mon. Sept., Oct. 12, Nov. Election Day, Nov. 11, Thanksgiving and Christmas. **Connecticut.** Jan. 1, Feb. 12, Feb. 22, Fast, May 30, July 4, 1st Mon. Sept., Oct. 12, Nov. 11, Thanksgiving and Christmas.

UNITED STATES WEATHER BUREAU.

Small Craft Warning. A red pennant indicates that moderately strong winds that will interfere with the safe operation of small craft are expected. No night display of small craft warnings is made.

Northeast Storm Warning. A red pennant *above* a square red flag with black center displayed by day, or two red lanterns, one above the other, displayed by night, indicates the approach of a storm of marked violence with winds beginning from the *northeast*.

Southeast Storm Warning. A red pennant *below* a square red flag with black center displayed by day, or one red lantern displayed by night, indicates the approach of a storm of marked violence with winds beginning from the *southeast*.

Southwest Storm Warning. A white pennant *below* a square red flag with black center displayed by day, or a white lantern *below* a red lantern displayed by night, indicates the approach of a storm of marked violence with winds beginning from the *southwest*.

Northwest Storm Warning. A white pennant *above* a square red flag with black center displayed by day, or a white lantern *above* a red lantern displayed by night, indicates the approach of a storm of marked violence with winds beginning from the *northwest*.

Hurricane, or Whole Gale Warning. Two square flags, red with black centers, one above the other, displayed by day, or two red lanterns, with a white lantern between, displayed by night, indicate the approach of a tropical hurricane, or of one of the extremely severe and dangerous storms which occasionally occur.

PRESIDENT AND VICE-PRESIDENT.

President FRANKLIN D. ROOSEVELT New York
Vice-President JOHN N. GARNER Texas

Members of the Cabinet (Up to March 4, 1933, when new Cabinet will be appointed by the President-Elect)—*Secretary of State*, HENRY L. STIMSON, New York; *Secretary of the Treasury*, OGDEN L. MILLS, New York; *Secretary of War*, PATRICK J. HURLEY, Oklahoma; *Attorney General*, WILLIAM D. MITCHELL, Minnesota; *Postmaster General*, WALTER F. BROWN, Ohio; *Secretary of the Navy*, CHARLES F. ADAMS, Massachusetts; *Secretary of the Interior*, RAY LYMAN WILBUR, California; *Secretary of Agriculture*, ARTHUR MASTICK HYDE, Missouri; *Secretary of Commerce*, ROBERT P. LAMONT, Illinois; *Secretary of Labor*, WILLIAM NUCKLES DOAK, Virginia.

MEMBERS 73RD CONGRESS FROM NEW ENGLAND. (1st Session, 1933)

R—Republican

D—Democrat

SENATORS

Terms expire March 4th in the year following each name

Maine.—Wallace H. White, Jr., R., Lewiston, 1937; Frederick Hale, R., Portland, 1935. **New Hampshire.**—Fred H. Brown, D., Somersworth, 1939; Henry Wilder Keyes, R., Haverhill, 1937. **Vermont.**—Warren R. Austin, R., Burlington, 1937; Porter Human Dale, R., Island Pond, 1939. **Massachusetts.**—David I. Walsh, D., Fitchburg, 1935; Marcus A. Coolidge, D., Fitchburg, 1937. **Rhode Island.**—Felix Hebert, R., West Warwick, 1935; Jesse H. Metcalf, R., Providence, 1937. **Connecticut.**—Frederic Collin Walcott, R., Norfolk, 1935; A. Lonergan, D., Hartford, 1939.

REPRESENTATIVES

Terms of all expire March 4th, 1935

Maine.—1st District, Carroll L. Beedy, R., Portland; 2nd District, Edward C. Moran, Jr., D., Rockland; 3rd District, John G. Utterback, D., Bangor. **New Hampshire.**—1st District, William N. Rogers, D., Wakefield; 2nd District, Charles H. Tobey, R., Temple. **Vermont.**—At Large, E. W. Gibson, R., Brattleboro. **Massachusetts.**—1st District, Allen T. Treadway, R., Stockbridge; 2nd District, William J. Granfield, D., Longmeadow; 3rd District, Frank H. Foss, R., Fitchburg; 4th District, Pehr G. Holmes, R., Worcester; 5th District, Edith N. Rogers, R., Lowell; 6th District, A. Piatt Andrew, R., Gloucester; 7th District, William P. Connery, Jr., D., Lynn; 8th District, Arthur D. Healey, D., Somerville; 9th District, Robert Luce, R., Waltham; 10th District, George Holden Tinkham, R., Boston; 11th District, John J. Douglass, D., Boston; 12th District, John W. McCormack, D., Boston; 13th District, Richard B. Wigglesworth, R., Milton; 14th District, Joseph W. Martin, Jr., R., North Attleboro; 15th District, Charles L. Gifford, R., Barnstable. **Rhode Island.**—1st District, Francis B. Condon, D., Central Falls; 2nd District, John M. O'Connell, D., Providence. **Connecticut.**—At Large, Charles M. Bakewell, R., New Haven; 1st District, Herman P. Koppleman, D., Hartford; 2nd District, William L. Higgins, R., Coventry; 3rd District, Francis T. Maloney, D., Meriden; 4th District, Schuyler Merritt, R., Stamford; 5th District, Edward W. Goss, R., Waterbury.

UNITED STATES SUPREME COURT

Chief Justice, CHARLES EVANS HUGHES, of N. Y.; *Associate Justices*—BENJAMIN N. CARDOZO, of N. Y.; WILLIS VAN DEVANTER, of Wyoming; JAMES C. McREYNOLDS, of Tennessee; LOUIS D. BRANDEIS, of Massachusetts; GEORGE SUTHERLAND, of Utah; PIERCE BUTLER, of Minnesota; OWEN JOSEPHUS ROBERTS, of Pennsylvania; HARLAN F. STONE, of New Hampshire.

PRESIDENTS OF THE UNITED STATES

No. and Name	Politics	Native State	Born	Inaug.	Age at Inaug.	Date of Death	Age at Death
1. George Washington	Fed.	Va.	1732, Feb. 22	1789	57	1799, Dec. 14	67
2. John Adams	Fed.	Mass.	1735, Oct. 30	1797	61	1826, July 4	90
3. Thomas Jefferson	Rep.	Va.	1743, Apr. 13	1801	57	1826, July 4	83
4. James Madison	Rep.	Va.	1751, Mar. 16	1809	57	1836, June 28	85
5. James Monroe	Rep.	Va.	1758, Apr. 28	1817	58	1831, July 4	73
6. John Quincy Adams	Rep.	Mass.	1767, July 11	1825	57	1848, Feb. 23	80
7. Andrew Jackson	Dem.	N. C.	1767, Mar. 15	1829	61	1845, June 8	78
8. Martin Van Buren	Dem.	N. Y.	1782, Dec. 5	1837	54	1862, July 24	79
9. William Henry Harrison	Whig	Va.	1773, Feb. 9	1841	68	1841, Apr. 4	68
10. John Tyler	Dem.	Va.	1790, Mar. 29	1841	51	1862, Jan. 17	71
11. James Knox Polk	Dem.	N. C.	1795, Nov. 2	1845	49	1849, June 15	53
12. Zachary Taylor	Whig	Va.	1784, Nov. 24	1849	64	1850, July 9	65
13. Millard Fillmore	Whig	N. Y.	1800, Jan. 7	1850	50	1874, Mar. 8	74
14. Franklin Pierce	Dem.	N. H.	1804, Nov. 23	1853	48	1869, Oct. 8	64
15. James Buchanan	Dem.	Pa.	1791, Apr. 23	1857	65	1868, June 1	77
16. Abraham Lincoln	Rep.	Ky.	1809, Feb. 12	1861	52	1865, Apr. 15	56
17. Andrew Johnson	Rep.	N. C.	1808, Dec. 29	1865	56	1875, July 31	66
18. Ulysses Simpson Grant	Rep.	Ohio	1822, Apr. 27	1869	46	1885, July 23	63
19. Rutherford Birchard Hayes	Rep.	Ohio	1822, Oct. 4	1877	54	1893, Jan. 17	70
20. James Abram Garfield	Rep.	Ohio	1831, Nov. 19	1881	49	1881, Sept. 19	49
21. Chester Alan Arthur	Rep.	Vt.	1830, Oct. 5	1881	50	1886, Nov. 18	56
22. Grover Cleveland	Dem.	N. J.	1837, Mar. 18	1885	47	1908, June 24	71
23. Benjamin Harrison	Rep.	Ohio	1833, Aug. 20	1889	55	1901, Mar. 13	67
24. Grover Cleveland	Dem.	N. J.	1837, Mar. 18	1893	55	1903, June 24	71
25. William McKinley	Rep.	Ohio	1843, Jan. 29	1897	54	1901, Sept. 14	58
26. Theodore Roosevelt	Rep.	N. Y.	1858, Oct. 27	1901	42	1919, Jan. 6	61
27. William Howard Taft	Rep.	Ohio	1857, Sept. 8	1909	51	1930, Mar. 8	72
28. Woodrow Wilson	Dem.	Va.	1856, Dec. 28	1913	56	1924, Feb. 3	67
29. Warren G. Harding	Rep.	Ohio	1865, Nov. 2	1921	55	1923, Aug. 2	58
30. Calvin Coolidge	Rep.	Vt.	1872, July 4	1923	51	.....	..
31. Herbert Clark Hoover	Rep.	Iowa	1874, Aug. 10	1929	54	.....	..
32. Franklin Delano Roosevelt	Dem.	N. Y.	1882, Jan. 30	1933	51	.....	..

RELIGIOUS AFFILIATIONS

Friends (Quakers)—Hoover.
Episcopalians—Washington, Madison, Monroe, Gen. W. H. Harrison, Tyler, Taylor, Pierce, Arthur, F. D. Roosevelt.
Presbyterians—Jackson, Polk, Buchanan, Cleveland, Benj. Harrison, Wilson.
Methodists—Johnson, Grant, McKinley.
Unitarian—John Adams, J. Q. Adams, Fillmore, Taft.

Reformed Dutch—Van Buren, T. Roosevelt.
Baptist—Harding.
Congregationalist—Coolidge.
Disciples—Garfield.
 Jefferson and Lincoln did not claim membership in any denomination. Hayes attended the Methodist Church, but never joined.

ANCESTRY

Swiss—Hoover.
English—Washington, J. Adams, Madison, J. Q. Adams, W. H. Harrison, Tyler, Taylor, Fillmore, Pierce, Lincoln, Johnson, Grant, Garfield, Cleveland, B. Harrison, Taft, Harding, Coolidge.
Welsh—Jefferson (a family tradition).
Scotch—Monroe, Hayes.
Scotch-Irish—Jackson, Polk, Buchanan, Arthur, McKinley, Wilson.
Dutch—Van Buren, T. Roosevelt, F. D. Roosevelt.

The following Presidents were lawyers—J. Adams, Jefferson, Madison, Monroe, J. Q. Adams, Jackson, Van Buren, Tyler, Polk, Fillmore, Pierce, Buchanan, Lincoln, Hayes, Garfield, Cleveland, B. Harrison, McKinley, Taft, Wilson, Coolidge, F. D. Roosevelt.
 Washington was a planter and surveyor; Andrew Johnson, a tailor; Hoover, a mining engineer.

SESSIONS OF THE CONTINENTAL CONGRESS

Philadelphia, Sept. 5, 1774, to Oct. 26, 1774; May 10, 1775, to Dec. 12, 1776.
 Baltimore, Dec. 20, 1776 to Mch. 4, 1777.
 Philadelphia, Mch. 4, 1777, to Sept. 18, 1777.
 Lancaster, Pa., Sept. 27, 1777, to Sept. 27, 1777.
 York, Pa., Sept. 30, 1777, to June 27, 1778.
 Philadelphia, July 2, 1778, to June 21, 1783.

Princeton, N. J., June 30, 1783, to Nov. 4, 1783.
 Annapolis, Md., Nov. 26, 1783, to June 3, 1784.
 Trenton, N. J., Nov. 1, 1784, to Dec. 24, 1784.
 New York City, Jan. 11, 1785, to Nov. 4, 1785; Nov. 7, 1785, to Nov. 3, 1786; Nov. 6, 1786, to Oct. 30, 1787; Nov. 5, 1787, to Oct. 21, 1788.



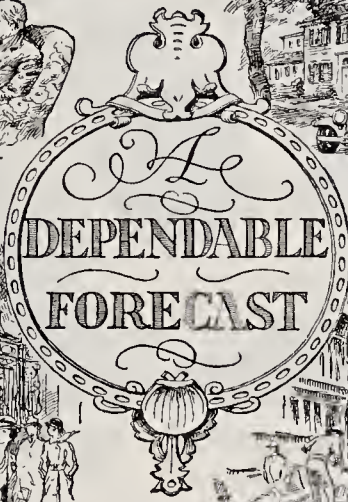
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EDUCATION



TRAVEL

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Do you know of the many ways in which a life insurance program can guarantee your home, provide for your children's education, prepare the way for a comfortable retirement income for yourself?

Read about the many uses of Life Insurance in our booklet, "My Financial Problems." A copy will be sent on request.

John Hancock
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LIFE INSURANCE COMPANY
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 197 Clarendon Street, Boston, Mass.



SLADE'S SPICES

Now wrapped in moisture-proof Cellophane

MAKERS of pure foods for more than 100 years, D. & L. Slade Company pride themselves on the extra high quality and purity of their spices. In order that the full aroma and zest of these superior spices may reach you as fresh as when first milled, every package is now wrapped in moisture-proof Cellophane. When you need spices, be sure to ask for Slade's.

GINGER
CINNAMON
NUTMEG

CREAM of TARTAR
WHITE PEPPER
ALLSPICE

MUSTARD
CLOVES
PIMENTO

Likewise, when using Cream of Tartar it pays to use the best. Slade's Cream of Tartar is of the highest possible quality, always uniform and fresh.

SLADE'S PEANUT BUTTER



Slade's Peanut Butter is a wholesome food for all the family and has a taste thrill that will delight you. Packed in glass.

BELL'S SEASONING

With Bell's Seasoning any housewife need not worry about flavor when turkey-time comes. It's an all-year product. Use it in stews, casseroles, meat loaves, soups and for roast fowl, roast meats and baked fish.



Slade's Spices are sold by leading grocers.

D. & L. SLADE COMPANY

Makers of Pure Food Products for over 100 years

189 STATE STREET, BOSTON, MASS.

1933 hath 180 school days.



When Duty whispers low "Thou must,"
The youth replies, "I can."

—RALPH WALDO EMERSON.

Features, Holidays, Etc.

Chandler's Calendar

Jan. 1	Happy New Year to All.
Jan. 2	Xmas vacation ends.
Jan. 20	Forum Speaker Col. Carroll J. Swan, Pres. Boston Adv. Club.
Feb. 17	Valentine Party. In School Auditorium.
Feb. 22	Washington's Birthday. No School this day.
Mar. 17	Annual Senior Prom. In Ritz-Carlton Ball Room.
Mar. 24	Spring Vacation Starts. Lasts till April 3.
Apr. 13	Closing Exercises of Evening Division.
Apr. 14	Forum Speaker President F. P. Speare, Northeastern Univ.
Apr. 19	Patriots' Day. No School this day.
Apr. 22	Alumnæ Reunion. Copley Plaza Hotel.
May 30	Memorial Day. No School this day.
June 16	Class Day. Commencement Dance Marblehead, Mass.
June 20	Graduation Exercises. Repertory Theatre, Boston.
June 21	No More Classes Till Sept. 11.
July 5	Applications for Admission Coming in. (5 to 31).
Aug. 1	Visitors at School. More Applications. by mail. (1 to 31).
Sept. 4	Labor Day. A day of rest for all.
Sept. 11	School Opens For it's 50th year.
Sept. 22	Acquaintance Party.
Sept. 25	Registration and Opening of Evening Division.
Oct. 9	Election of Student Council Members.
Oct. 12	Columbus Day. No Classes this day.
Oct. 27	Hallowe'en Party. In School Auditorium.
Nov. 11	Armistice Day. No School this day.
Nov. 30	Thanksgiving Day. A three-day vacation period.
Dec. 22	Xmas Party. Vacation starts today.
Dec. 25	A Merry Christmas to All.

In this year of stress a business education for a New England girl is particularly desirable.

For fifty years the Chandler School of Business has successfully trained and placed in desirable positions thousands of the finest types of New England girls.

The Chandler School has a well-deserved reputation throughout New England for,—

1. Its high standards.
2. The success of its graduates.
3. Its most modern and complete methods of instruction.
4. Its faculty and equipment.
5. The personnel of its pupils.
6. Its extra curricula activities.

Therefore:—

1. A Chandler School training is an asset for life.
2. A Chandler School training is to business what "sterling" is to silver.

The Chandler School offers,—

1. A 1-, 2-, or 3-year course in secretarial science.
2. Stenographic, executive and cultural courses.
3. An enjoyable school term in pleasant surroundings with delightful associations, combined with an unequalled training for a successful secretarial career.

A complete story of our educational opportunities will be sent to you promptly upon request — or better still, visit us at 161 Massachusetts Avenue, in the educational section of Boston's historic Back Bay.

**THE CHANDLER SCHOOL
BOSTON**

FOR THE BATH

Billy Dan's

**PINE
TREE
SOAP**

THE BEST CAKE OF SOAP
IN THE WORLD

ASK YOUR DOCTOR -

PINE TREE PRODUCTS CO.
NEWPORT, NEW HAMPSHIRE
(The Sunshine Town)

Now 10c AT ALL GOOD
STORES

I-CAR-DE Mayonnaise

Still Maintains Its Quality

The largest selling mayonnaise in
New England for over
nineteen years



I-CAR-DE MAYONNAISE

Positively Different

and

I-CAR-DE Sandwich Spread

I-CAR-DE Old-Fashioned New England Piccalilli

I-CAR-DE Italian Style Spaghetti in glass jars

are just as delicious as I-CAR-DE Mayonnaise

JAMES A. AICARDI & SONS, INC.

Dorchester, Mass.

LYNN DE LUXE OIL BURNERS

for year around comfort



Over 130,000 Satisfied Owners in
New England

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LYNN PRODUCTS COMPANY

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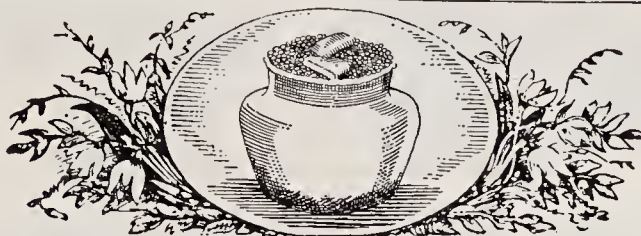
:

Lynn, Mass.

or


See the Lynn Dealer in Your Town

SATURDAY—52 Bean Suppers a Year—(1933)



THE OLD BEAN POT

I cannot tell what Vitamins within this pot are found,
Or just how many Calories may be reckoned to the pound;
But well I know its merits and loud its praise I sing,
For it's a dish that is quite fit to set before a king!

Month	Legal Holidays & Bean Nights	A Famous New England Tradition
JAN.	Celebrate New Year's Day on Monday, January 2nd—serve B & M Baked Beans four Saturdays.	In early Puritan days, cooking was strictly forbidden on the Sabbath—which began at sundown Saturday, and lasted until sundown Sunday. So the Puritan housewife baked beans all day Saturday, served them in the evening for supper, and for every meal on Sunday.
FEB.	Washington's Birthday, Wednesday, February 22nd. Also four B & M Bean Saturdays.	
MAR.	31 days without a holiday, alas and alack! B & M Baked Beans very much appreciated this holiday-less month.	Of all the Puritan influences which are popularly supposed to have fastened themselves on New England, the Saturday baked bean supper is unquestionably the most lasting and widespread.
APR.	No holidays this month (except April 19th in Maine and Mass.)—but one extra Bean Night, five Saturdays in all.	
MAY	Decoration, or Memorial Day, Tuesday, May 30th. Serve B & M Oven Baked Beans every Saturday night.	Burnham & Morrill Company, in Portland, Maine, are preserving this old New England tradition by continuing the genuine New England method of really baking beans. In rows and rows of old-fashioned brick ovens, B & M New England Oven Baked Beans are baked for you, in open pots—the original way. Not until they are ready for you to eat, are they sealed in tins.
JUNE	No holidays. Summer begins June 21st. The 3rd, 10th, 17th and 24th are B & M Bean Nights.	
JULY	Tuesday, July 4th, is Independence Day. And July has 5 Saturdays—5 B & M Baked Bean Nights.	Ask your grocer for B & M New England Oven Baked Beans. Make this delicious dish a regular feature of your menu, either as the "Saturday night baked bean supper" of Old New England times, or a substantial and hearty meal for any day in the week.
AUG.	No legal holidays this month, but this is vacation time anyhow—so who cares? B & M Beans are great summer camp supper treats.	
SEPT.	Labor Day is a funny name for a holiday. It comes on Monday, September 4th. "30 days hath September—" and 5 Saturday Bean Suppers, too.	BURNHAM & MORRILL COMPANY Portland, Maine
OCT.	Columbus discovered America on October 12th—so we get a holiday. You can't discover finer flavor than that of B & M Oven Baked Beans.	
NOV.	Armistice Day, Saturday, November 11th; Thanksgiving, Thursday, November 24th. Also 4 B & M Bean Saturdays.	 B&M The Sign of Good Foods
DEC.	As a Christmas (Monday, December 25th) gift, Santa Claus brings 5 Saturdays this month—one extra B & M Bean Night.	

A FAITHFUL FORECAST

FOR TODAY — TOMORROW
NEXT MONTH—and NEXT YEAR

WIRTHMORE
TRADE-MARK REGISTERED

POULTRY, DAIRY and STOCK FEEDS

Bring greater satisfaction and better profits to the user.

These New England-Made Feeds stand the test of time—and are constantly being improved and perfected. You can rely on them for superior results.



SENT FREE ON REQUEST

TO POULTRYMEN: 1933 edition of valuable booklet—
“Timely Topics on Poultry Management.” Also egg
record card and plans for building poultry houses
and equipment.

TO DAIRYMEN: Milk record sheets — 10 or 25 cow size,
also interesting leaflets describing Wirthmore Dairy
Rations.

Send Your Request to

ST. ALBANS GRAIN CO., St. Albans, Vt.

No Wonder Folks are
Going Back to

Good
Old-Fashioned
New England
“Grub”



Sure, some of the fancy new dishes are all right but they can't take the place these days of plain, hearty food, cooked the good, old-fashioned way.

Any man, woman or kid who ever tasted hash made by the old New England recipe, relishes Prudence Corned Beef Hash like a new-found friend, with a thrill that is gratifying to see.

Piping hot, savory, crusted a golden brown, Prudence Hash wins you before the first bite and continues to satisfy every whim of appetite, every need of nourishment.

Only young, tender beef is used — no scraps, no skin, no gristle. Mealy, white Aroostook potatoes are boiled in the same water as the meat; but separately, *after* the meat has been removed and the pot skimmed of fat. You've simply got to taste Prudence Hash to realize the difference.

Costly? We should say not! — a big, husky serving for six cents. Hard to prepare? Why, all you do is open the can and brown the hash in a frying pan; takes three minutes.

Maybe you have never tasted good, old-fashioned Corned Beef Hash. Well, there's a treat waiting for you at just about every grocery store. *Only remember this:* There's as much difference in brands of hash as there is in kinds of people; so be sure you get *Prudence*.

Boston Food Products Company
Boston

PRUDENCE
Ready-to-Brown
CORNED BEEF HASH

P. S.— And Prudence Beef Stew and Lamb Stew
are just as good as Prudence Hash.

New England Made

For many years the standard for quality finishes for the home

Kyanize

Varnishes — Paints — Enamels

Modern, quick drying, long wearing,
waterproof and all possessing
that wonderful quality

SELF SMOOTHING



Book in Colors — FREE

If you do not use
Kyanize Finishes,
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Boston Varnish Co.

Everett Station

BOSTON : MASS.

BURNETT'S

a New England
kitchen favorite since 1847

GOES MODERN IN DRESS



SINCE 1847 only one change has taken place in the famous Burnett Flavoring Extracts. That change is a new, sturdy bottle. The new bottle is built so that it *will not tip over easily*.

Amber glass is used because it protects against harmful light rays. This better bottle contains a full amount of the delicious *pure* extracts that women have used with confidence for nearly a century . . . Burnett's!



If you haven't a copy of "Doubly Delicious Desserts" we will gladly send you one for 10 cents. It is an unusual collection of tempting, easy-to-prepare desserts. Write for your copy *today*.

**JOSEPH BURNETT
COMPANY**

437 D STREET - - BOSTON, MASS.



Look for this new Burnett package at your grocer's

MINARD'S FIRST AIDS FOR THE HOME.

For a hundred and forty years, since the days when our country was young, readers of The Old Farmer's Almanac have turned to this publication for accurate and authentic information.

For eighty of those years, generation after generation of New England people have found in Minard's Liniment a reliable help for many of the physical problems that are so common to humanity.

MINARD'S LINIMENT has become a household tradition as a First Aid in the treatment of all muscular aches and pains, stiff joints, backache, rheumatic pains, neuralgia, bruises, sprains, headaches, frost bite, tired and burning feet. It has also been proved an ideal remedy for sore throat and colds. When rubbed in and inhaled, its soothing effect is immediate. Minard's Liniment is supplied in small, medium and large bottles.

Although Minard's Liniment was the foundation of the business of the famous old Minard Company, of Framingham, Massachusetts, other products of equally fine reputation and quality have from time to time come along to meet the needs of the people as those needs grew and multiplied with the progress of New England's history and civilization.

MINARD'S ANTISEPTIC MOUTH WASH AND GARGLE. This is unexcelled as a mouth wash, deodorant and throat gargle. It is a certain preventative—safer, more powerful and less expensive. Removes the cause—sweetens and purifies the breath. Use full strength or dilute with one part water for minor throat irritations, mouth wash, bad breath, hoarseness, sunburn, abrasions, insect bites, burns or cuts. As a nasal spray dilute with two parts water and use with atomizer. For children dilute with one part water. Minard's Antiseptic can be used freely in all natural cavities of the body as a lotion or spray. Minard's Antiseptic Mouth Wash and Gargle comes in 16 ounce, 8 ounce and 3 ounce bottles.

MINARD'S INHALANT. This is a safe First Aid in the treatment of head colds. Scientists have proved that one cause of colds is something smaller than a germ that enters the nostrils on particles of dust. They have also proved that these particles of dust may be discouraged by the use of Minard's Inhalant. The result is another cold avoided. Apply the Inhalant to a folded handkerchief and inhale frequently throughout the day, breathing deeply of the vapor. Also apply to pillow or clothing. Many mothers sprinkle a few drops on their children's blouses as they start for school. Thus the little folks breathe this pleasant and protective vapor all day long. Minard's Inhalant is supplied in 2 ounce and ½ ounce bottles.

MINARD'S ATHLETES' RUB offers sure and effective relief to those who suffer from tired, burning feet and contains the antiseptic that kills the germ causing the dreaded Athlete's Foot. Use for cracks under the toes, simple ringworm, lame muscles, muscular stiff neck, sprains, bruises, burns, superficial congestion, insect bites or stings. This Minard's First Aid product may be used freely as a rub, best results being obtained after a hot bath. It is indispensable for those engaging in athletic sports. Minard's Athletes' Rub is supplied in 16 ounce and 3 ounce bottles.

MINARD'S ALKOBALM. This well known Minard First Aid product provides a wonderfully refreshing and invigorating massage. It is delightful for use as a rubdown after bathing and is a favorite for both home and hospital use being highly recommended by nurses everywhere during illness and convalescence for its cooling and invigorating qualities. Minard's Alkobalm, a rubbing alcohol, is supplied in 16 ounce and 6 ounce bottles.

Other members of the famous Minard family, the uses of which are known to all, are Minard's BAY RUM, supplied in 16 ounce and 4 ounce bottles—Minard's EAU DE QUININE (hair tonic), with sprinkler top in 8 ounce bottles—Minard's RUSSIAN MINERAL OIL, in 16 ounce and 32 ounce bottles—Minard's WITCH HAZEL in 16 ounce and 4 ounce bottles and Minard's MILK OF MAGNESIA in 16 ounce and 4 ounce bottles.

Members of the Minard's family of First Aid products are on sale by all leading dealers. Minard's ANTISEPTIC MOUTH WASH AND GARGLE, Minard's ATHLETES' RUB and Minard's INHALANT may be had in generous 10c sizes at the following chain stores: Woolworth's, Kresge's, Newberry's, McClellan's, and the F. & W. Grand-Silver Stores. They are also sold in larger sizes at drug and department stores.

For information desired relative to any of its First Aid products for the home, you are invited to write to the MINARD COMPANY, FRAMINGHAM, MASSACHUSETTS, U. S. A.



WHEN YOU'RE
BOSTON
BOUND!

HOTEL BRUNSWICK HOTEL LENOX

on either side
of Copley
Square

Two famous Back Bay hotels that offer you pleasant convenience of location and moderate living costs with complete and cordial hotel service!

A wide variety of dining rooms and restaurants . . . from the Brunswick Coffee Shop and Lenox Spa to the new Egyptian Room dinner-dance entertainments!

Room with bath: Single \$3-\$4.50—Double \$3.50-\$7. Room with running water: Single \$2.50-\$3—Double \$3-\$3.50. **Special year 'round offer—3 days and 2 nights**, including best outside rooms, private bath, 6 meals, Egyptian Room entertainment and theatre or sightseeing tour—all for \$10

L. C. PRIOR, President and Managing Director

HOME HEATING HINTS

Families who have never used New England Coke before find that it not only costs less per ton but also less per season, because of its high carbon content and consequently greater number of heat units per pound.

It's more economical to keep the firebox filled than to run a low fire. This is especially true of New England Coke, which gives greater heating satisfaction and comfort and lasts longer if the firebox is filled above the level of the door.

Why sift ashes? New England Coke leaves about a barrel of ashes to the ton, and these are not worth sifting . . . another proof that this fuel is economical.

Even the little ash which New England Coke leaves should, however, be removed regularly. You will find with this or any fuel that the more room there is for air to circulate under the firebox, the greater efficiency you will get from your heater. The use of New England Coke means that ash removal is "necessary much less frequently."

Because there is so little ash, you will find in using New England Coke that the fire needs to be shaken only once in every 24 hours, and then very gently.

Because New England Coke is as nearly a pure fuel as science can devise, there are no impurities to cause soot, smoke or dust. This, together with the fact that New England Coke leaves so little ash, makes this a CLEAN fuel.

That New England Coke is so clean is due in part to its structure—that is, its hard, firm character which results in freedom from breakage and dust. The most important reasons, however, lie in the care with which the "raw" fuels which go into New England Coke are first selected and then processed.

Housewives especially like New England Coke for its cleanliness because it does away with the irksome tasks of laundering and housecleaning which a less carefully manufactured fuel necessitates. And in those homes where women prefer to take care of the heater, users of New England Coke find its cleanliness as well as its lightness and ease of handling welcome indeed.

You'll be surprised at the little attention required. A New England Coke fire normally needs attention only once each morning and night. And it's so easy to run a heater with this superior fuel! There are only three simple rules. Fill the firebox full, use less draft than is necessary for other solid fuels and shake gently.

A primitive kind of coke was made by the Chinese as long as 2000 years ago. Today, benefited by centuries of scientific advancement and experimental research, man is able to make an immeasurably superior product. Yet even today there is a big difference between cokes. New England Coke is made in the largest domestic coke plant in the world, and every pound of New England Coke is the result of careful, scientifically controlled manufacturing processes.

Because there is so much difference between New England Coke and inferior products, New England Coke dealers place a little seal on your delivery ticket certifying that the fuel you have received is genuine, GUARANTEED New England Coke.

Every ton of New England Coke that is sold is guaranteed to give complete satisfaction. And every purchaser of New England Coke is entitled to a free demonstration of the proper methods of firing this fuel. If after such a demonstration, the customer is dissatisfied for any reason, the remaining fuel will be removed without charge and his money will be refunded.

Whatever type of heater you may have, you'll find that New England Coke will heat your home efficiently and economically. It will maintain a steady flow of heat for the warm air or hot water heater as well as "get up steam" quickly in a steam heater.

There are sizes of New England Coke for all types of heaters. Your fuel dealer will advise you which one to use for the best results in your heater.

New England Coke is definitely a New England product. It is not only made in New England by New England labor, but it is made especially for the best results in New England homes. New England weather does shift from one extreme to another, and New England Coke is manufactured with this in mind. This fuel is quickly responsive to the demands of sudden changes, yet gives a steady, even heat under all conditions.

There are hundreds of fuel dealers all over New England who have been appointed authorized distributors of New England Coke. These dealers all display the familiar blue and white New England Coke shield. Look for this emblem in buying your fuel.

If you don't know where you can buy New England Coke, the GUARANTEED fuel, in your neighborhood, write or telephone to the New England Coke Company. (See opposite page for address and telephone number.)



**Economical
Less Ash
Cleaner
More Heat
Guaranteed**

Made in New England by New England
Labor for New England Homes. Sold
all over New England by Authorized
Dealers. Look for the blue and
white shield.

NEW ENGLAND COKE COMPANY
250 Stuart Street, Boston, Mass.
HUBBARD 4670



Not quite as old as the
Old Farmer's Almanac

*—but a favorite for
one hundred years*

The Boston Post

The Breakfast Table
Paper of New England

By reading the Boston
Post every day you
get the news and fea-
tures that over 400,000
readers find they can-
not get along without.

Any Newsdealer will provide the Post for
you regularly, or you may order it direct
from the Boston Post for 50c a month, or
\$5 a year, either Daily or Sunday.

For over 50 years
Glenwood

the famous New England
 range has made cooking
 easier in countless homes



If you burn coal, gas, oil or wood
 for cooking and heating there's a

Glenwood

RANGE or HEATER

made for you at a price to fit
 your pocketbook

*See them at the authorized Glenwood Dealer
 — or write to Glenwood Range Co.,
 Taunton, Mass., Boston office 60 Union Street*

IT PAYS TO OWN A GLENWOOD

Boston Transcript Almanac for 1933

*(Published as a Guide to Intelligent and Entertaining
Reading During the Next Twelve
Months)*

JANUARY

SNOW. Our City Editor is Snowed Under With City Activities at Their Height and Typewriters Humming With Humor, Gossip and Significant Discussion.

FEBRUARY

THAW. Our Fashion Editor Thaws Out With the Ground Hog to Forecast What the Well Dressed Woman Will Be Wearing Next Spring.

MARCH

WIND. Our Editorial Writers Glory in This Month by Taking the Wind Out of Political Chatter to Make It Informing and Interesting.

APRIL

SHOWERS. Our Real Estate Editor Enjoys This Month Providing Places to Visit Between Showers.

MAY

BLOSSOM TIME. Social Events Rival Flowers in Blossoming at This Time of Year and Our Society Editor Works Over Time to Keep You Informed On Who Will Be Whose Bride Next Month.

JUNE

RARE DAYS. Our School and College Department Hustles All Over New England Handing Out Diplomas.

JULY

HOT. Our Out-of-Town Correspondents Tour Vacation-Land to Find the Cool Spots Where Your Friends Are Enjoying Themselves.

AUGUST

DOG DAYS. Our City Editor Goes Out to Find the Dog While Our Magazine Editor Provides You With Light Entertaining Features to Take Your Mind Off the Weather.

SEPTEMBER

LABOR DAYS. Our Trade and Financial Editors Read Charts and Statistics Night and Day to Furnish You an Intelligent Picture of What the Fall Business Will Be.

OCTOBER

INDIAN SUMMER. Our Sports Editor Works Saturday Afternoons to Give You the Usual Sunday Accounts Saturday Evening.

NOVEMBER

COLD. Our Music and Drama Editor Keeps You Supplied With Enough Entertaining Reading So You Can Stay Inside and Escape the Chilly Air.

DECEMBER

BLIZZARDS. Our Book Editor Sorts Out the Fall Blizzard of Books and Shows You What You Will Want to Read Yourself and What You Will Want to Give Your Friends for Christmas.

EVERY MONTH

AND EVERY WEEK For that Matter, The Boston Evening Transcript provides you with these and many other features, including two long-time favorites, The Churchman Afield and The Genealogical Department. Above all, it provides you with accurate and comprehensive news that is not only informative, but delightful reading.

Have you tried—

AGRICO

*An improvement in fertilizers
backed by 75 years of experience*

For 75 years The American Agricultural Chemical Co., has been making fertilizers in New England, especially adapted to the needs of New England's crops, soils, and short-growing season. Its Bowker, Bradley, E. Frank Coe and A. A. C. brands are well known to three generations of New England farmers.

Recently, after years of research and careful field tests, The American Agricultural Chemical Co., offered a new brand of fertilizer called Agrico. The immediate success of Agrico exceeded all expectation. Now, wherever crops are grown, farmers are changing to Agrico.

Farmers are changing to Agrico because they are getting better crops with Agrico. And here's why. *Agrico contains extra plant foods that provide extra crop-producing power.*

Agrico has the same high quality and good mechanical condition that made the other "AA QUALITY" Brands so popular. And in addition to the usual amount of nitrogen, phosphorus and potash found in these standard grades of fertilizer, Agrico brings to the crop, new, important, health-giving, plant-food elements that have long been needed. Agrico is truly a real improvement in fertilizers—a step forward in the science of plant feeding.

If you haven't used Agrico yet, try it this coming season on at least a part of your crops and see the difference it can make. Remember Agrico is made only by The American Agricultural Chemical Co. and there's a brand especially made for each crop.

		Available Nitrogen Phosphoric Potash Acid	
Agrico for Lawns, Trees and Shrubs	7	6	6
Agrico for Fruit	7	6	6
Agrico for Aroostook with 10% Potash (Potato Grade)	5	8	10
Agrico for Aroostook (Potato Grade)	5	8	7
Agrico for Truck	4	10	5
Agrico for New England	4	8	10
Agrico for Onions	3	10	6
Agrico for Corn	3	10	6
Agrico for Grain	2	12	4

*Consult your nearest "AA Quality" Dealer. Or write to us
concerning your soil and fertilizer problems.*

The AMERICAN AGRICULTURAL CHEMICAL Co.
Sales Offices and Factories at
North Weymouth, Mass. West Haven, Conn.

*Read the only general Farm Magazine for
New England rural folks*

100,000 Farm Homes
Now Subscribe to

NEW ENGLAND HOMESTEAD

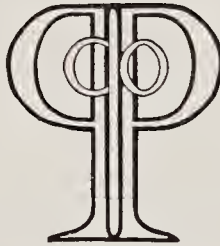
60c a year — 2 years, \$1.00

Free sample copy mailed on request

If you are interested in selling supplies to New England farm folks, write for information as to rates, circulation, etc.

NEW ENGLAND HOMESTEAD, Springfield, Mass.

**PHELPS
PUBLISHING
COMPANY**



**PRINTERS
PUBLISHERS
BINDERY**

Springfield, Mass.

*If it's anything in the Printing Line —
We can do it!*

Whether your next printing job calls for circulars, catalogs, town reports, or the finest color work of any kind, call on us for our complete printing service.

Estimates gladly given

PHELPS PUBLISHING CO., Springfield, Mass.

WHAT IS *MOXIE*?

Moxie is a pure, refreshing, wholesome, distinctively different, carbonated beverage originally made in New England nearly fifty years ago and now rapidly extending its field of distribution throughout the United States and to foreign lands.

It is a healthful, beneficial, thirst-quenching drink, which refreshes and invigorates delightfully and quickly.

Every bottle of Moxie contains more than eighteen separate and distinct elements. Each one of the beverage ingredients is wholesome and of purest quality; compounded, blended, thoroughly aged and bottled under carefully supervised hygienic conditions by the most modern methods.

Doctors, chemists, pure food experts and dietitians are not only regular users of Moxie, but also constantly suggest its use by others, because Moxie is a complete, satisfying and effective thirst-quencher in itself. The scientific blending of woodland herbs and roots produces an aromatic tang and a delicious sweet-bitter taste, which is unique and distinctive.

Public speakers, opera singers, theatrical stars and athletic champions have found Moxie refreshingly helpful, very soothing and re-vivifying in the course of their most strenuous efforts.

Quality and Purity have always been and shall ever be the predominating policies in the production of Moxie.

Artistic labels, gold foil and fancy packages are not necessary to attract Moxie customers. The plain Moxie bottle has been the insignia of quality for nearly fifty years and is our and your continuing assurance of genuineness.

Ask for Moxie at your neighborhood store. Serve it to your family and your house guests. It has a new taste-thrill, the thrill of a famous flavor that whets the appetite and satisfies thirst. *It is distinctively different.*

Ask any one of the millions of children, grown-ups and granddaddies who are Moxie drinkers why it is that "*a case in the cupboard and a bottle in the ice-box*" has become a widespread custom. Then you will hear so many nice things about Moxie that further explanation on our part will be unnecessary.

Moxie is a safe drink always, because the high standard maintained in its making guarantees the same uniform purity and quality in every bottle.

Moxie may be obtained at all first-class soda fountains in bottles or instantly prepared by the dispenser from genuine Moxie syrup.

If by chance you have never been favored with a glass of Moxie, may we ask your indulgence now. Take a "two-minute vacation" today with a glass of Moxie at your neighborhood store. Try it again tomorrow. Try it when you are tired; when you are thirsty. Each glassful of this appetizing bitter-sweet flavored beverage will taste better than the last one. Drink it before meals and with your meals. Serve it when company drops in. Give it to the children any time, because Moxie *always* tastes good and *is good* for everybody.

We greet you with this message. You will find that our friendly way of doing business and the methods we use in calling attention of the public to the merits of Moxie will be as attractive and as unique as the beverage itself, which for nearly half a century has been first in distribution of all New England beverages. Everybody here knows Moxie intimately.

FRANK M. ARCHER, *General Manager*
THE MOXIE COMPANY
 Boston, Massachusetts

NATIONAL BROADCASTING COMPANY, INC.

HOTEL BRADFORD

PROGRAM MANAGERS
OF
BROADCASTING STATIONS
WBZ AND WBZA



BOSTON, MASS

December 1, 1932.

My dear Farm Friends:

A Connecticut poultryman writes me that he frequently receives 30 to 90 cents premium for a case of eggs because he listens to our daily agricultural programs. A Maine farmer finds the potato market broadcast an important factor in marketing his crop. Hundreds of other letters testify to the value of radio market reports and the practical application of suggestions by our guest speakers.

It does not make any difference whether you have just a few fruit trees, a backyard garden or a large farm, you can get complete market information and timely suggestions that will mean dollars and cents to you!

These programs are broadcast to you over the New England stations WBZ and WBZA in cooperation with the United States Department of Agriculture and the Departments of Agriculture of the several New England states. They are for the entire farm family. There are two broadcasts each day for the farmer, a morning program for the homemaker and a weekly 4-H broadcast for the boys and girls.

I am eager to have these programs of ever-increasing value. Please be sure to call on me whenever you are in Boston. Your letters of comment and suggestion are always appreciated and, of course, we shall be glad to send you a detailed program of our agricultural broadcasts.

Very cordially yours,

E. J. Rowell

E. J. Rowell, Director
New England Agricultural Programs



America's favorite Silver Polish since 1865!



CANDO Silver Polish

For more than 68 years, CANDO has safeguarded the family silver . . . keeping it bright and beautiful through each successive generation. A soft, creamy paste that removes tarnish and restores lustre—safely—quickly—easily. Unequaled for Silver, Gold, Nickel, Cut Glass, Porcelain and all fine surfaces.

— and now — to keep your metals gleaming —
CANDO LIQUID METAL POLISH

Brass—copper—aluminum—wherever there is a dull, unsightly metal surface to restore to brilliant beauty — let Cando Liquid Metal Polish save you time and labor. Works quickly. Requires less rubbing. Gives unfailing results. Unequaled for pipes, faucets and bright work in the home.

Dispel stale, musty, disagreeable odors with Egyptian Deodorizer & Aerofume

A delightfully fragrant little candle that dispels odors from cooking; fresh paint, smoking, and other sources.



Indispensable in nursery and bathroom. Keeps air sweet and free from taint. Affords comfort and relief in the sickroom.

16 handy little candles in convenient box—complete with holder

Ask your Jeweler for Cando Pewter Polish

For a brighter, more cheerful home — insist on CANDO products. If your dealer does not stock them — kindly send us his name and address.

THE CANDO CORPORATION
25 Thorndike Street, Cambridge, Mass.



A Distinctive New England Organization

A great group of enterprising New England Grocers and Druggists, — 8,000 of them, — take pride in this Naborhood Store Insignia.

Centered among homes, and identified by this symbol of service and of mutual interest, their stores supply life's necessities, — both food and medicinal, — to their Nabors. Desiring to furnish the products most satisfactory to the families they serve, the progressive grocers and druggists of New England have found these products grouped best among those advertised in New England's street cars and buses.

There, before 96 million riders each month, these products are advertised beside the Naborhood Car Card and the Naborhood Store Insignia. As a result, car-riders, faced, as they alight, by the Insignia *on* the window and the display *in* the window, have come to act instinctively upon the three-fold tie-up between

The Manufacturer's Card in the Cars
The Dealer's Window Display
The Dealer's Counter Display

a tie-up, which completes the bond of mutual confidence and business relationship between producer, retailer, and consumer.

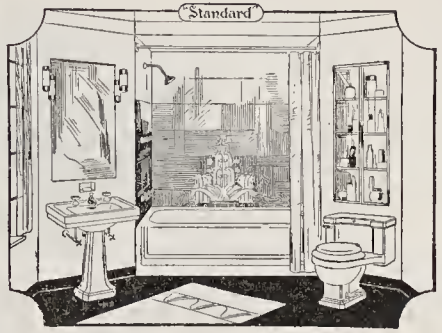
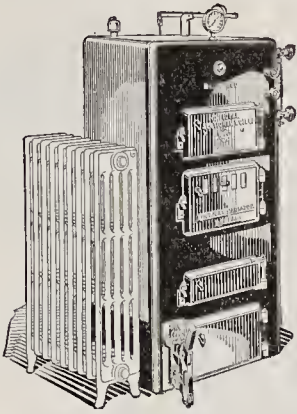
Cementing all into unity, are the field men of New England Merchandisers, Inc., anxious to serve and to assist with advice and information. The Naborhood Store's interests are their interests.

We rejoice that the Dual Appeal of Naborhood Car Card and Naborhood Insignia, which was designed to foster this community of interest, has been so outstandingly successful through the years.

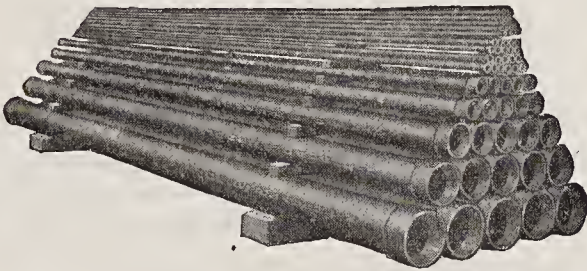
EASTERN ADVERTISING COMPANY

"Car Card Advertising all over New England"

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Corrugated Roofing and Siding

Conductor Pipe and Gutter

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120 Middle Street
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Lew. 3160



**NEW
ENGLAND
POULTRYMAN**

AMERICA'S FASTEST GROWING POULTRY PAPER

The Voice of the Poultry Industry
of the Rich North East

offers to

FARMERS and FANCIERS

Its Dependable and Useful Service

\$1.00 a Year

Special 3 Years, \$2.00

12 big issues with over 600 pages a year, packed full of live poultry news and poultry facts. Edited by experts and read by all the alert poultry raisers of New England.

TO THOSE

Who Would Read

New England Poultryman is the trusted teacher of advanced poultry practices in the most advanced poultry raising section of the world.

TO THOSE

Who Would Advertise

New England Poultryman offers its approved advertisers a market place where they can do business with discriminating buyers of quality goods.

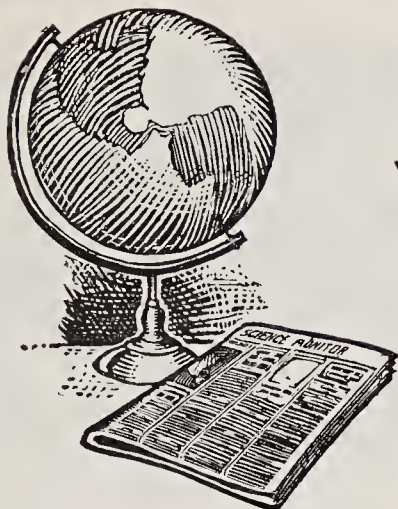
We believe that the poultrymen of New England produce the highest quality poultry and eggs that can be produced because they are the best informed in scientific methods. We are proud to have helped them to establish their present leadership.

You, too, can share their knowledge and its resultant prosperity by reading regularly *New England Poultryman*. Send 25c today for trial subscription, bringing you the next 3 numbers priced 20c each.

New England Poultryman

4 PARK STREET

(Overlooking Old Boston Common)



Boston Is Famous Along the World's Highways

for Publishing the First
International Daily
Newspaper—

The Christian Science Monitor

In nearly every large city and town in the United States, in England, in France, in Germany, in far off Australia, in remote places in Africa, in fact on all the main highways of the world, you will find regular subscribers and eager readers of **THE CHRISTIAN SCIENCE MONITOR**.

Out of New England has come this newspaper which "dares to be different," in that it prints only the constructive news of the world, and refuses to exploit crime and scandal.

Are you, who live in Boston or New England, acquainted with this paper which is fast becoming such an important factor in promoting international good will? Do you know its keen editorials, its March of the Nations column, its features on the best books, art and music of the world? If not, sign the coupon now and begin to read this newspaper.

THE CHRISTIAN SCIENCE MONITOR,
107 Falmouth Street, Boston, Massachusetts

Please enter my subscription to The Christian Science Monitor for a period of one month 75c; three months \$2.25; six months \$4.50; one year \$9.00, for which I enclose remittance.

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Is an
Important
Trade Facility
Serving Every
Community

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BOSTON
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Donnelly Adv.

**PEP UP
YOUR PARTY**

EDUCATOR

Toasterettes

WILL DO IT

THEY'RE GREAT WITH COCKTAILS

THEY GO BIG WITH SOUP

THEY'RE SWELL WITH CHEESE

AMERICA'S FAVORITE
WHOLE-WHEAT TREAT!

**HAMMERED
WHEAT
THINSIES**

NEW SINGLE BITE SIZE
NEW SQUARE SHAPE

They're Thinner

200 IN BOX *Only* 10¢

**IF YOU LIKE CHEESE
YOU'LL LOVE**

NEW EDUCATOR

**TOASTED
CHEESE
THINS**

FRESH BAKED DAILY FOR
10,000 GROCERS!

EVERY BITE A
NEW DELIGHT!

ORIGINAL

*Cape Cod
Cookies*

NEW GREEN BOX

40 COOKIES 20¢

Rubber Footwear Calendar

JANUARY—Snow. Bad month for COLDS. The whole family needs gaiters. Ask for FIRESTONE. Also rubber boots for your FARM WORK.

FEBRUARY—Snow. Beginning to thaw. Rubber boots by FIRESTONE essential. Rubber gaiters for the whole family, to keep their feet WARM and DRY,

MARCH—Slush, mud. FIRESTONE Farmsters for FARM WORK. Keep the gaiters handy. As the ground begins to get a little drier, get FIRESTONE rubbers.

APRIL—Showery. It doesn't pay to get the feet WET. FIRESTONE light rubbers just the thing for the whole family. Fishing season opens. See pages 55, 56. See also FIRESTONE fishing boots.

MAY—Sunny days. Canvas shoes for the young people now in order. Best value made by FIRESTONE.

JUNE—Warm days. Now everybody needs canvas shoes. Deb Sandals for the girls and women. Best style and value by FIRESTONE. FIRESTONE tennis shoes in order.

JULY—Hot days. Deb Sandals by FIRESTONE wanted by everybody. Canvas shoes for the CAMP. Also FIRESTONE footholds for showery days.

AUGUST—Even HOTTER. Deb Sandals by FIRESTONE. New canvas shoes for the boys.

SEPTEMBER—Cool days. School opens. New canvas shoes for school boys and girls. Also special FIRESTONE gym shoes.

OCTOBER—Cooler days. Get FIRESTONE rubbers for all the leather shoes you are now buying. Hunting season opens. See page 51. FIRESTONE hunting boots at your dealer's.

NOVEMBER—Cold rains. A little snow. Gaiters made of rubber, lined for warmth, by FIRESTONE, for all the family. Basketball season. Thorogrip best basketball shoe made.

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