## AY <br> 81 <br> .306

NUNC COGNOSCO EX PARTE


TRENT UNIVERSITY LIBRARY

PRESENTED BY

PROF. F.A. HAGAR

Digitized by the Internet Archive in 2019 with funding from Kahle/Austin Foundation

$$
\text { Ay } 81 . F 306 \quad 1949
$$

The 157th Continuous Year of Publication


Weather and Planting Tables, Predictions


## There's a wonderful future in BLUEBERRIES

Or maybe it's in eggs, or in asparagus.

The egg money or the blueberry money or any money that you earmark can build a wonderful future. It can send a boy to college, or pay off the mortgage, or provide leisure for you later on.

If you put it into life insurance it does something besides. It makes sure that there will be no slip up if something should by chance happen to you. The easy way to plan this sort of wonderful future is to talk to a John Hancock agent. He will welcome your inquiry.


Number One Hundred and Fifty-Seven

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

$$
1<+0
$$

Being 1st after Bissextile or Leap Year, and (until July 4) 173.3rd year of American Independence.
Fitted for Boston, and the New England States, with Special Correc-
tione and Calculations to Answer for all the United 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 $1 \% 92$
IBY ROBERT B. THOVIAS.


> AUTUMN - Wheezy, sneezy, freezy
> WINTER - Slippy, drippy, nippy
> SPRING - Showery, flowery, bowery
> SUMMER - Hoppy, croppy, poppy.
Old English Wit.

Copyright, 1948, By
MABEL M. SWAN, Est.
BROOKLINE, MASS.
Cover T.M. Registered in U.S.
Patent Office. Sold By: THE AMERICAN NEWS CO. AND BRANCHES

## Published by:

 YANKEE, INC. DUBLIN, N. H.
## TO PATRONS \& CORRESPONDENTS

This 157th continuous edition of The Old Farmer's Almanac(k), is published for Atomic Year 4. We find ourselves still in the white waters of postwar readjustments; inflation, inadequate housing, domestic and international tensions, family and personal unsettlement. Wartime passions and fcelings liave not yet died away. The assurance of peace through world government is not yet with us. The victory of good, though it seemed promised, over evil is not yet apparent. It is clear that this year will, as have others, remain a testing ground on which thinking individuals will resolutely oppose evil, yet will continue to examine standards, customs, beliefs with utmost care. God manifests Himself in many ways. His guidance will be apparent to those who are willing to recognize in their individual lives His laws, too.
S.A.S., Weston, Mass. In answer to your question as to. whether the stock market is going up or down in 1949, we beg to state that if you think it will go up, it will go down, and vice versa. Lulu B ., New Britain, Conn. You request the actual number of snowflakes which fell in New England during the month of December. 1947. Our staff reports the actual count they made, which came to quite a figure, remaius inaccurate inasmuch as several of the flakes which fell on the Eastern side of Mount Mansfield, near Stowe, Vermont, becane mixed up with some which had blown up from the ground (already counted). Sorry, better luck next time. J. B. Baesweiler, Germany. Glad to know this Almanac is being used in your school to stem the tide of Russian propaganda.

David Morton, of Amherst, Massachusetts, has again prepared the poetry on this year's Calendar Pages. B. M. Rice, of Peterborough, New Hampshire, has once more written the Farm Calendars, and edited most of the remainder of the edition. Professor Loring B. Andrews, of Scituate, Massachusetts, has prepared the astronomical data. Venerable Abraham Weatherwise has once more completed the weather predictions and prognostications. Last year this Almanac made its first bow in 156 years to the "comics." This met with considerable favor. It is continued herewith by Francis Dahl-lis life story-and examples of his popular work.
Many government departmeuts have again helped us with statistical material and we thank them for it. Also, you will find an interesting summary of Automobile Laws contributed to this issue by the Americau Automobile Association. In addition, more than a few noted journalists and scientists will be found on the pages following the Calendars.

As usual, the press, the radio stations, and others in positions to befriend us have been extremely helpful and cooperative. We reiterate that without this splendid interest and support these many years this Almanac could not have maintained its unbroken record of publication. Our gratitude to these men and women is deeply felt.
With great regret, we note the passing of Alton P. Swan during this past year, one of the heirs of Mabel M. Swan-a brother of Carroll Swan.

Of weather this past-and this coming-winter, we ask rour attention to pages which follow. The caution which Mr. Weatherwise provided in last year's edition with regard to sun spots seems to have bcen well given if the first six months of 1948 (which are all we have to go by before our press date on this edition) are anything like the last six may prove to be.
In conclusion, we wish to express our appreciation to the many readers of, and advertisers in, this Almanac who have for so many years given us the confidence to carry on. It is to be hoped we may merit the continuance of this support. Mau, however, in these great things can only propose, God is the true disposer. In this then by our works, and not by our words, that we would be judged. These we hope will sustain us in the humble though proud station we have so long leed, in the name of

June 1, 1948
Your ob'd servant,

- Famous flower discoveries
- Prize "big crop" Vegetables

- All SUPPLIES, NEW GADGETS


#### Abstract

Almost every fascinating page in full natural color! Shows newest flower creations, more flavorful vegetables, rare bulbs, roses, fruits, and supplies. Gives the down-to-earth know-how every modern gardener wants.


## FAMOUS BRECK'S SPECIALTIES

## - Fully Cupped Cosmos

Only Breck's in oll the U.S.A. has this rare ond beoutiful cosmos now available for the first time ever!

## - Harvard Hybrid Corn

A new horticulturol mosterpiece originoted by Horvord University plont breeders and exclusive with Breck's! Big extra early crops of Golden Bontam quolity in small spocel

- Giani Camellia - Flowered Begonias

Spectaculor, satin-textured blooms of immense size (up to $8^{\prime \prime}$ across). Fully double! Exotic huesI
... and scores of other rore Breck's exclusives.

## BRECK'S - 901 Breck Bldg., Bosfon 10, Mass.

Send Breck's 1948 Garden-Book-Catalog. I enclose 9c for postage, handling.

Name
$\qquad$

YOUR COPY IS READY

Send $9 c$ in stamps for postage, handling.

SEEDSMEN SINCE 1818


## EXPLANATIONS AND SIGNS

In acoord with long time usage the left and right hand calendar pages beginning respectively on pages 14 and 15 will be seen to contain numerous symbols (known as signs) and abbreviations which denote the many happenings in the heavens and on the earth which the OFA purports to set forth. On this page and pages 92 and 93 we include a brief summary of these hieroglyphics - the careful study of which will reward you with not only greater appreciation of this almanac but also stimulation with regard to further study of the wonders of the universe.

## Names and Characters of the Principal Planets.

|  | ㅇ Venus. $\oplus$ The Earth. $\delta^{*}$ Mars. | 24 Jupiter. <br> h Saturn. <br> Hor of Uranus. | $\begin{aligned} & \Psi \text { Neptune. } \\ & \text { Е Pluto. } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| Names and Characters of the Aspects. |  |  |  |
| б Conjunction, or in <br> $\square$ Quadrature, 90 deg <br> 8 Opposition, or 180 | e same degree.五. grees. | Dragon's Head, o Dragon's Tail, or | ending Node. ending Node. |

## Names and Characters of the Signs of the Zodiac.

> 1. $P$ Aries, head.
> 2. 8 Taurus, neck.
> 3. $\square$ Gemini, arms.
> 4. $\sigma$ Cancer, breast.
5. $\Omega$ Leo, heart.
6. IIf Virgo, belly.
7. $\xlongequal{\sim}$ Libra, reins.
8. Mi Scorpio, secrets.
9. I Sagittarius, thighs.
10. W Capricornus, knees.
11. Aquarius, legs.
12. 广) Pisces, feet.

## Chronological Cycles for 1949.

Golden Number
Epact
$12 \mid$ Solar Cycle
$26 \mid$ Roman Indiction . . . 17
30|Dominical Letter . . B|Year of Julian Period 6662
Movable Feasts and Fasts for 1949.

| Septuagesima Sun. Feb. 13 | Good Friday | Apr. 15 | Whitsunday | June 5 |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Shrove Sunday | Feb.27 | Easter Sunday | Apr. 17 | Trinity Sunday | June 12 |
| Ash Wednesday | Mar. 2 | Low Sunday | Apr. 244 | Corpus Christi | June 16 |
| 1st Sun. in Lent | Mar. 6 | Rogation Sunday May 22 | 1st Sunday in |  |  |
| Palm Sunday | Apr.10 | Ascension Day | May 26 | Advent | Nov. 27 |

## THE SEASONS, 1949

Eastern Standard Time
Winter Solstice (Winter 1948), December 21, 5.34 p.M. -Sun enters Capricornus , Wo Vernal Equinox (Spring, 1949), March 20, 5.49 p.m. - " " Aries, Summer Solstice (Summer), June 21, 1.03 P.m. - ". ". Aries, Autumnal Equinox (Autumn), September23, 4.06 A.m. - ". " Jibra, Winter Solstice (Winter), December 21,11.24 p.m. - " " Capricornus

## CALCULATIONS AND CORRECTIONS

## (For Outside New England, see Pages 7, 10, 11, 12)

While the predictions of the Calendar pages are made for the latitude and longitude of Boston and are in Eastern Standard Time, the time of the 75 th meridian west of Greenwich, they may be used throughout the United States by applying the corrections given here and in the tables on pages 7 and 12.

The Table given below contains corrections in minutes of time for a number of important places in New England, and any other place in New England can use the correction of the place in the Table which is nearest in longitude to itself.

For the Rising and Setting of the Sun, Moon and Planets add tabular quantity if longitude from Boston is West, but subtract it if East; and this will give the value when the place is in or near the same latitude as Boston. When the latitude of the place differs oonsiderably from that of Boston, the correction will also be right when the celestial body is on or near the Equator; but when it is remote from the Equator so much acouraoy cannot be expected.


## EARTH IN PERIHELION AND APHELION, 1949

The Earth will be in Perihelion on January 3, 9 A.M., distant from the Sun $91,323,000$ iniles. The Earth will be in Aphelion on July 2,4 P.M., distant from the Sun $94,453,000$ miles.

STANDARD TIME IS USED THROUGHOUT THIS ALMANAC



The World Calendar does not change. It is the same each year. *Dec. 31 is Year End Day-World Holjday. **In Leap Years June 31, another World Holiday is added.


## SEPTEMBER.

$\overline{-5} |$

## NOVEMBER.





## LAST WINTER'S WEATHER

## "WHITE, LONG, COLD"

These past five winters-first "mild," then "turbulent," then "wet," then "old fashioned" in most places, and finally, last year"s "white, long, and cold," followed the predictions of Mr. Weatherwise. In addition, his caution that the summer of 1948 might see crop failures due to sunspot conditions was absolutely in order. The cold May spelt apple failure in many places. Many millions of bees died of starvation.

Back in 1900 the city clerk of Providence, Rhode Island, kept careful track of the accuracy of the weather predictions of Mr. Weatherwise for that year. He tound them $33 \%$ correct as against the United States Weather Bureau's $35 \%$ iu its daily torecasts.

For the year 1947 a Selectinan of Dublin, New Hampshire, kept a careful record of the Wcatherwise's accuracy as a weather forecaster. At the end of the time he announced the old gentleman had becn $78.5 \%$ correct, which comparcd with the Weather Bureau's $65.5 \%$ correct in its five day forecasts for the same perlod.

Of the twenty-two extreme weather spells in 1947 against which businessmen, farmers, and others might well have sought to be forewarned, Mr. Weatherwise correctly named in advance elcven. This compares with six called five days in advauce by the Bureau.

To get back, however, to last year's winter-On December 26 there started in New York City a storm that was to leave the lieaviest snowfall ever recorded there, cven surpassing the Great Blizzard of '88. Snow started at about $5: 30$ a.m. and ended at $4 \mathrm{a} . \mathrm{m}$. December 27, leaving behind in the city better than 28 inches and, in the suburbs, amounts up to three feet

More and morc storms, until on March 3 the Blue Hills Observatory outside Boston reported a total winter precipitation ot more than eleven feet (later more than twelve feet) and Boston was approaching with 85.5 inches the all-time 96.4 inches of 1873-4.

As the snow accumulated over northern New England unusual reports of wild-life condition began to come in. It was estimated that only a third of the Canadian geese wintering off Cape Cod survived. let, as an oddity, one great confused flock circled over southern New Hampshire in the last days of February. In vermont a herd of more than fifty deer literally invaded a small town-starved out from their natural winter browsing. Bobcats and lynx whieh usually waxed tat on hares aud rabbits were reported killed iu a semistarving condition and less than half their normal weight. The sott engulfing snow never offered them a traveling crust and they starved while their prey waxed fat.

A wild, cold winter ready-made for the howl of wolves, but when spring came, it came with a rush.' Only the absorbent earth long parcled in the tall, and snow covered before moch frost had set in it, and the tact that the mountains of snow had comparatively little watcr content prevented floods.
Many natural weather curiositics were observed in this weird winter. Up in North Adams. Mass., in an otherwise respectable blizzard, lightning sizzled and thunder roared to the consternation of week-end/skicrs. In early March the wondering folks of Hancock, New Hampshire were treated to a snowfall with uncarthly lighting (ffects-due to the peculiar refraction ot the sun's rays. suldenly evarything turned yellow, then as suddenly purple, and at last for a tull twenty minutes, a lovely pink. Portlind, Maine saw a fol foot. rosy-hued fog bank, half a mile long on April 6th in its harbor, March was a month of wonders. Marthas Vineyard was treated to the spectacle of a blue moon. In Dayton, Ohio, ou March 26 a green rain fell discoloring clothiug and houses. The night before Bostonians saw thrce moons-the rcal moon with a "moon dog"' on either
side. But by that time spring was really on the way which to side. But by that time spring was really on the way, which to
a winter-weary New Lingland was the greatest phenomena of all.

## NEXTT WINTER'S WEATHER—"ICY"

The winter of 1948 (November, December), and 1949 (January Fehruary, March) will not be as cold on the whole as the winter just past. However, it will last longer into March and there will be trequent storms of rain and slect as well as snow which will create
unusually icy conditions. unusually icy conditions.

## TIDE CORRECTIONS

To obtain the time ano height of high water at any place, apply the differences in accordance with the sign given to the daily predictions for Boston (Commonwealth Pier). Where a value in the "height difference" column is preceded by an*, the height at Boston should be multiplied by this ratio.

| Time <br> Difference h.m. | Height Difference Ft. | $\begin{gathered} \text { Time } \\ \text { Differ- } \\ \text { ence h.m. } \end{gathered}$ | $\begin{aligned} & \text { Heioht } \\ & \text { Differ- } \\ & \text { ence Ft. } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| MAINE |  | PENNSYLVANIA |  |
| Augusta : . . . . +350 | *0.4 | Philadelphia . . . +229 | *0.5 |
| Bangor . . . . . -0 05 | +3.6 | DELAWARE |  |
| Bar Harbor . . -0 33 | +1.1 | Rehoboth . . . . -3 37 | *0.4 |
| Boothbay Harbor. -0 20 | +0.8 | MARYLAND. |  |
| Castport Old Orchard . . . - 028 | $* 1.9$ -0.7 | Baltimore . . . - 425 | *0.1 |
| Portland . . . - -0 10 | $-0.6$ | Ocean City . . -3 57 | *0.4 |
| Stonington. -030 | +0.2 | DISTRICT OF COLUAIBIA |  |
| NEW HAMPSHIRE |  | Washington . . . 308 | *0.3 |
| Hampton . +0 15 | -1.2 | VIRGINIA |  |
| MASSACHUSETTS |  | Norfolk . . . . . -1 54 | *0.3 |
| Fall River . . . . -3 16 | *0.5 | Vırginia Beach . . -3 14 | *0.3 |
| Falruouth - . . -0 40 | *1.1 | NORTH CAROLINA |  |
| Hyannisport . . . +045 | *0.3 | Beaufort . . - $259{ }^{\circ}$ | *0.3 |
| Lynn ${ }^{\text {L }}$. +005 | $-0.2$ | Carolina Beach. . -3 30 | *0.4 |
| Marblehead . . - 005 | * 0.3 | SOUTH CAROLINA |  |
| Manument Beach . -3 06 | *0.4 | Myrtle Beach. . . -345 | *0.5 |
| Nantasket . . . +010 | +0.1 | Charleston . . . . -3 15 | *0.5 |
| Nantucket . . . . +050 | *0.3 | GEORGIA |  |
| New Bedford. . . -3 21 | *0.4 | St. Simon's Island -2 51 | *0.7 |
| Oak Bluffs . . . +0 05 | *0.2 | Savannah . . . . -2 40 | *0.8 |
| Onset . . . . . -3 06 | *0. 5 | Tybee Beach . . . -3 26 | *0.8 |
| Plymouth . . . 000 | +0.1 | FLORIDA |  |
| Provincetown . . +015 | -0.3 | Daytona . . . . 320 | *0.4 |
| Scituate . . . . . -0 05 | $-0.5$ | Fort Lauderdale . -2 15 | *0.3 |
| Wellfleet . . . . +020 | $+0.6$ | Jacksonville . . -0 40 | *0.1 |
| Woorls Hole . . -3 01 | *0.2 | Miami . . . . -3 00 | *0.3 |
| RHODE ISLAND |  | Paln Beach . . -3 20 | *0.3 |
| Block Island . . - 321 | *0.3 | Port Everglades . -2 15 | *0.3 |
| Narragansett Pier -3 31 | *0.4 | St. Augustine . . -2 20 | *0.5 |
| Newport . . . -3 31 | *0.4 | St. Petersburg . . +3 58 | *0.2 |
| Providence . . -3 11 | *0.5 | WASHINGTON |  |
| Watch Hill . . . -2 06 | *0.3 | Ilwaco . . . . . +144 | -3.5 |
| CONNECTICUT |  | . Port Townsend . . +504 | *0.5 |
| Long Island Sound -0 02 | *0.7 | Seattle . . . . +537 | -2.0 |
| New Londorı . . . -1 47 | *0.3 | OREGON |  |
| NEW YORIK |  | Astoria . . . . +137 | 3.3 |
| Coney Island • -3 00 | *0.5 | Cape Arago : . . +1 19 | -4.8 |
| Long Beach So. ${ }^{\text {Long }}$ Island Sound +057 | *0.5 | Yaquina Head ! . +1 12 | -3.7 |
| Long Island Sound +0 08 | *0.5 | CALIFORNIA |  |
| Ocean Beach . . . -3 57 | *0.4 | Catalina Island . . -1 33 | $-5.9$ |
| Southampton . . -3 22 | *0.3 | Crescent City . . +056 | $-5.0$ |
| NEW JERSEY |  | Eureka . . . +120 | $-5.0$ |
| Atlantic City . . -3 57 | *0.5 | Long Beach . . . -1 37 | -5.5 |
| Bayside . . . -0 24 | *0.6 | Monterey ${ }^{\text {P }}$ - -030 | *0.4 |
| Cape May . . . - 337 | *0.5 | Point Mendocino + + 24 | *0.4 |
| Ocean City . . -3 17 | *0.4 | San Diego . . . . -1 35 <br> San Francisco +0 59 | *0.9 |
| Seabright <br> to . . . -3 44 | *0.5 | Santa Barbara . - 119 | -6.0 |
| Seaside Park |  | Santa Cruz . . + 008 | *0.4 |

Example: The figures for Fuil Sea in Columns 11 and 12 of the left hand Almanac pages 14-36 are the times of high tide at Commonwealth Pler in Boston Harbor. The heights of these tides are given on the right hand pages 15-37. The heights are reckoned from Mean Low Water: each day has a set of figures-upper for the morning-and lower for the evening. Since Guif ports are not beset with the tidai problems of ports on the open ocean, the conversion of the times of the tides at Boston to those of Miami is given by way of illustration.

See page 20, column 11.
BOSTON
MIAMI
High Tide
April 1.
Height
9.0 feet

High tide (Boston) $\quad 1.00$ P.M.
. 00 P.M.E.S.T.
-
Correction above
High tide (Miami) 10.00 A.M.E.S.T.
Height (Miami)
2.7 feet
( $8.9 \times 0.3$ )

## ECLIPSES FOR THE YEAR 1949

In the year 1949 there will be fonr eclipses, two of the Snn and two of the Moon.

- I. A Total Eclipse of the Moon, April 12, 1949. This celipse will be visible from all points in the United States. The total phase will begin at $10: 28$ P.M. E.S.T., the middle of the celipse will occur at 11:11 P.M. E.S.T., and the total phase will end at $11: 04$ P.M. E.S.T. The beginning of the eclipse will be visible gencrally in the western part of the Indian Ocean, southwestern Asia, Europe, Africa, the Atlantic Ocean, the Arctic and Antarctic regions. North America, except the northwestern nart, South America, and the eastern part of the Pacific Ocean. Thic ending will be visible generally in the western part of Africa, the extreme southwestern part of Enrope, the Atlantic Ocean, the Arctic and Antarctic regions, North America, Sonth America, and the castern and central parts of the Pacific Ocean.
II. A Partial Eclipse of the Sun, April 28, 1949. This eclipse will be invisible in the United States. It will be visible generally thronghont Enrope, Western Russia, northern Africa, the North Atlantic Ocean, and from points within the Arctic Circle.
III. A Total Eclipse of the Moon, October 6, 1949. This lnnar eclipse will also be visible from all points in the United States. The total phase will begin at $9: 19$ P.M. E.S.T., mitdle of the eclipse will be reached at $9: 56$ P.M. E.S.T., and the end of the total phase will come at $10: 33$ P.M. E.S.T. The beginning of the eclipse will he visible generally in western Asia, Enrope, the western part of the Indian Ocean, Africa, the Atlantic Ocean, the Arctic and Antarctic regions, North America, except the extreme western and northwestern parts, South America, and the extreme sontheastern part of the Pacific Ocean. The ending will be visible generally in central and western Europe, western Africa, the Atlantic Ocean, the Arctic and Antarctic regions. North America, South America, and the eastern and central parts of the Pacific Ocean.
IV. A Partial Eelipse of the Sun, October 21, 1949, not visible in the United States. Except for Anstralia, except the western part. New Zealand and the eastern part of Tasmania. this eclipse will be visible only from the islands and waters of the sonth Pacific Ocean, including the greater portion of Antarctica.


## OCCULTATIONS OF ALDEBARAN, 1949

No occultations of the bright star Aldebaran (Alpha Tauri) will be visible to observers in the United States dnring 1949.

## COLD AND MILDER?

Ivan R. Tannenhill, Chicf of the Forecasting Division of the Weather Bureau, believes that the Thited States as a whole may well be at the beginning of a trent toward cooler temperatures. He points out that for the last 60 or 70 years, reaching its peak in the 1930's, this country has been getting warmer and warmer. Mr. Tannenhili says such cycles are the rule in the past with range trends up to 1000 years or more.

Dr. Ldward $\mathbf{F}$. Deevey, Jr. of the Yale faculty generally agrces with Mr. Tannculith, and he is looking for a really cool trend of the long range 1000 years or more type for the whole earth. His predictions arc based on, his study of pollen deposited in glacial lake bottoms. Dr. Decvey's findings show that there have been four major climactic periods, each characterized by a different kind of forest growth. We are at present in the "oak-chestunt" phase - colder and more inoist.

Now as to the other side. Writes John J. O'Nelll in the New York Herald Tribune and the Boston Globe -. "not only is the eutire Northern Hemisphcre getting, warmer, bnt this may be true of the Southern Hemisplere as well" and this is not just "a change in the weather but a climactic change affecting the cntire earth."
What is causing the earth to become warmer? Probabiy, Mr. O' Neill thinks, not a variation in the heat given off by the sun-for there is scarcely a ncasurable variation in that. The answer, may be in radinm and nranium or even heavier clements in the carth's crnst.

## VENUS, MARS, JUPITER AND SATURN, 1949.

Below are given the times of the rising or sctting of the fianets 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. For explanation of kevs (used in adjusting times given to your town) see pages 4 and 12 - especially if you live outside New England.


## MORNING AND EVENING STARS, 1949

(A Planet is called Morning Star when it is above the horizon at sunrise, and Evening Star when it is above the horizon at sunset. More precisely, it is a Morning Star when it is less than $180^{\circ}$ west of the Sun in right acsension and Evening Star when it is less than $180^{\circ}$ east. When the planet is near conjunction or opposition, the distinction is unimportant.)

Mercury will be favorably situated for being seen as an Evening Star when near its greatest eastern elongations about January 17, May 10 and September 7. On these dates it will set $1 \mathrm{~h} .33 \mathrm{~m} ., 1 \mathrm{~h} .52 \mathrm{~m}$, and 1 h .09 m , respectively, after sunset. It will be seen as Morning Star when near its greatest western elongations, about February 28, June 28 and October 19, on which dates it will rise 1 h .06 n . 1 h .13 m. , and 1 h .00 m ., respectively, before sunrise.

Venus will grace the hours before sunrise as a Morning Star until April 16, when the planet reaches superior conjunction. During the rest of the year Venus will be an Evening Star and will attain greatest brilliance for the year on December 26 .

Mars is an Evening Star until March 17, when it reaches conjunction, and is a Morning Star thereafter for the rest of the year.
Jupiter becomes a Morning Star as the year begins and remains so until July 20, when it reaches opposition. Thereafter, for the rest of the year, it is an Evening Star.

Saturn is a Morning Star at the year's beginningand so continues until February 21. Thence, until September 2, when it comes to conjunction with the sun, it is an Evening Star and thereafter, until the year's close, a Morning Star again.

# CALCULATIONS AND CORRECTIONS If You live outside new england <br> (For New Englund - See Page Four) 

Times obtained for a place other than Boston by the conversions described below will in cvery case be in the standard Time of the time zone in which the place lies. Some States by State ordinance do not observe Standard Time during the whole or part of the year. To obtain the time in everyday use in those States during the period such State ordinances are in effect one hour shou d be added to the time derived by conversion. The times used herein are Eastern Standard Time. To compensate for Daylight Saving Time in those States or Cities which adopt it by local ordinance, add one hour.

A direct reading of the figures on the Almanac pages gives information that applies precisely and solely to Boston. The examples which follow interpret the significance of this information and illustrate the way to get the same information for a place outside New England, such as Dallas. The date, April 11, used for the purpose of the illustrations, has been chosen at random.

Sunrise and Sunset. The times of sunrise and sunset at Boston on April 11 are read directly from columns 4 and 6 on page 20. The key letters adjacent to these times, in columns 5 and 7, are inclices to the table on page 12 whereby the times of sunrise and sunset at Boston are converted into those for other key cities, to wit:-

BOSTON
DALLAS

Sunrise
Key Letter

5:10 A.M.E.S.T. G

| Sunrise (Boston)Correction (Column 5:10 A. M. E.S.T. |  |
| :---: | :---: |
|  |  |
| G, page 12) | +:52 |
| Sunrise (Dallas) | 6:02 A.M.C.S.T. |
| Sunset (Boston) | 6:22 P.M.E.S.T. |
| Correction (Column |  |
| K, page 12) | t:35 |

Sunset (Dallas) 6:57 P.M.C.S.T.

Sunset
Key letter

6:22 P.M.E.S.T. K
.E.S.T.

6:22 P.M.E.S.T. orrection (Column

Dawn and Dark. The approximate times dawn will break and dark descend are found by applying the length of twilight taken from the table on page 93 to the times of sunrise and sunset given on the calendar pages. The latitude of the locality determines the column of the table from which the length of twilight is to be selected.

## BOSTON

(Latitude $42^{\circ} 22^{\prime} \mathrm{N}$.)


## DALLAS

(Latitude $32^{\circ} 48^{\prime} \mathrm{N}$.)
Sunrise
6:02 A.M. Subtract length of twilight (Column 4 of table)
Dawn breaks Sunset Add length of twilight
Dark descends
$\frac{1: 28}{4: 34 \mathrm{A.M.C.S.T.}}$
$\frac{1: 28}{\text { S:57 P.M. }}$
$\frac{1: 25 \text { P.M.C.S.T. }}{}$

Sun Fast. The column headed "Sun Fast" is of primary use to sundial enthusiasts. The figures thercin tell how fast on each day the time indicated by a properly adjusted and graduated sundial will be of the time indicated hy a clock. On April 11 sun time in Boston will be 15 minutes Fast of Eastern Standard Time. The time indicated by a sundial located elsewhere than in Boston is converted to clock time by applying two corrections, the "Sun Fast" correction for Boston and that for the locality given in Column I of the table on page 12.

BOSTON

Sundial time
Sun fast

2:34 P.M. -:15

Eastern Standard
Time
2:19 P.M.

DALLAS

| Sundial time <br> Sun fast <br> Correction (Col- <br> umn I, page 12) | $-1: 17$ A.M. |
| :--- | :--- |
| Central Standard  <br> Time $9: 43$ |  |
|  |  |

Length of Day. The figures in the column headed "Length of Day" give directly the length of time the Sun will be above the horizon at Boston. The length of day in other localities is found by subtracting the time of sumrise from that of sunset for each locality. (See Sunrise and Sunset above).

## BOSTON

Length of day
$\begin{aligned} & \text { (From calendar } \\ & \text { pages) }\end{aligned}$
$\quad 13 \mathrm{~h} 12 \mathrm{~m}$

Moonrise and Moonset. The procedure for finding the times of moonrise and moonset follows that for finding those of sunrise and sunset except that, for localities outside New England, the constant additional correction taken from Column on page 12 must be applied.

## BOSTON

Moonset
Key letter
4:34 A.M., E.S.T.

DALLAS

> Moonset (Boston) 4:34 A.M. Correction (Column J, page 12) $+: 38$ Correction (Colunn D. page 12) $+: 04$

Moonset (Dallas) 5:16 A.M.,C.S.T.

Moon Souths. The time the moon souths in Boston is converted to the time it is due south in a locality other than Boston by applying the appropriate corrections from Columns I and on page 12.

## BOSTON

DALLAS
Moon souths
10:55 P.M.E.S.T.

| Moon soutlıs |
| :--- |
| (Boston) |


| Correction (Col- |
| :--- |
| umn I, page 12) |$+: 53$

Correction (Col-
umn 12) page 12) $+: 04$
Moon souths (Dallas)

The other information concerning the Moon contaned on the left hand Almanao pages applies without correction throughout the United States.

Risings and Settings of the Planets. The times of the rising and setting of the naked eve Planets with the excention of Mercury are given for Boston in the tahle on page 9. The procedure for converting these times to those of other localities follows that for converting the tinnes of sunrise and sunset given above.

Planetary Aspects. The planctary aspects indicated by the symbols and abbreviations on the right hand Almanac pages $15-37$, are explained on pages 4 , 76 and 77.

## TIDES: See page 7.

## WEATHER OUTSIDE NEW ENGLAND

Barring Easterlies and Tropical Storms it may be said that readers of the Almanac living outside of New England and West of the IIudson will experience much the same changes in the weather as those indicated herein . . . provided one day is subtracted for each Time Zone West of Boston.
ALMANAC DATA－OUTSIDE NEW ENGLAND
TABLE FOR FINDING TIMES OF SUNRISE，SUNSET，MOONRISE，MOONSET，AND RISING AND SETTING TO WITHIN＇ 5 MIN．ACCURACY ANYWHERE IN U．S．A．
（See explanation on preceding pages 10 and 11．）


$\bigcirc 1$
 $1++++++++1+111+1++++++++++$
A $\quad$ E

－g


Z
$1++++++++1+11++1++++++++++$

$1++++++++1+11++1++++++++++$


A

$\rightarrow$ E


- a
$1++++++++++1++++++++++++$
\＃

v g


$$
-1
$$


u

| 0 | 日 |
| :--- | :--- |
| 円 | 日 |



$$
\& g
$$

$\frac{+++++++++++++++++++++++++}{\text { ．}}$


## Mid-Summer Prediction!

Slowly rising thirsts beginning in May, continuing through September, and reaching peaks on torrid week-ends-offset by tall, cool glasses of Clicquot Club beverages.

Economy note-always ask for Clicquot Club. You get more for your money in the honest full quart bottle- 32 ounces instead of the 28 in some so-called "big" bottles. It's delicious!

AN EXTRA DRINK IN EVERY BOTTLE!

## Clicquot Club

 the "flavor-aged" ginger ale

## JANUARY hath 31 days.

1949


The enormous death of day, Lald out upon the hills. The eye has brought away, The eye that nothing fills. Not the vast curving sky

That bends above the oid
Day that is stretched to die - That scarce the hilis can hold On a quarter inch of eye,


官
Aspects, Holidays, Heights of High Water, Weather, etc.

Farmer's Calendar.

You will have more time to think things out this month than any other. There will be pencil work and taxes and planning for the farm year, but there should be, too, a kind of general stock-taking in your mind as to the whole business of farming these days.
It's a fact that when this country was young almost every man was a farmer. It's a fact that to-day only about one fifth of our total population are farmers. And it's a bitter fact, when you come to think on it, that the citydwellers and the non-farmers in this country get ninety per cent of their necessary farm products from one half of our farmers-only ten per cent from the other half.

Look at it as you will, it means there are too many farmers, or, as in any other occupation, too many failures. But does that mean then a man liasn't the right to be a farmer. just as his Dad and Grandad-or Great-great-grandad-before him? Does it mean he hasn't the right to live on marginal lands and never lnow a year's prosperity or security or any modern convenience or comfort? That he lasn't the right to senseless toil and poverty? Does it? Or can this nation's economy afford to waste land and any man's energy?

Thesc are the things that you as a farmer might ask yoursclf. And perhans from them you will sprout long, long thoughts. May they be constructive.

1949] FEBRUARY, Second Month.
ASTRONOMICAL CALCULATIONS.

|  | Days. | 0 | 1 | Days. | $0 \quad 1$ | Days. | 0 | 1 | Days. | 0 | Days. |  | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 17 s . | 03 | 7 | 1515 | 13 | 13 | 17 | 19 | 1112 | 25 |  | 901 |
|  | 2 | 16 | 45 | 8 | 1456 | 14 | 125 | 57 | 20 | 1051 | 26 |  | 839 |
|  | 3 | 16 | 28 | 9 | 1436 | 15 | 12 | 36 | 21 | 1029 | 27 |  | 816 |
|  | 4 | 16 | 10 | 10 | 1417 | 16 | 12 | 16 | 22 | 1007 | 28 |  | 753 |
|  | 5 | 15 | 52 | 11 | 1357 | 17 | 115 | 55 | 23 | 945 |  |  |  |
|  | 6 | 15 | 33 | 12 | 1337 | 18 | 113 | 33 | 24 | 923 |  |  |  |

D First Quarter, 6th day, 3 h. 05 m., morning, W. O Full Moon, 13th day, 4 h. 08 m., morning, W.
© Last Quarter, 19th day, 7 h. 43 m., evening, E.

- New Moon, 27th day, 3 h. 55 m., evening, W.

|  |  |  |  |  | $\mathrm{etsf}_{\mathrm{et}}^{\mathrm{m}}$ | ${ }_{\text {Sheo }}^{\text {Sout }}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 Tu. |  |  | $21^{\frac{1}{4}}$ |  | [H\| 21 | 8 Psc |  |
|  | 2 W. | M 500 | e 1003 | 2 |  | J 317 |  |  |
|  | 3 Th. 6 | M | E 1006 | $22_{2}^{1} 2_{3}^{3}$ | 034 | K |  |  |
|  | 4 Fr. 654 | m 503 | E'10 08 | $23{ }^{2} \frac{1}{4} 3^{\frac{1}{2}}$ | $11_{\text {M }}{ }^{\text {P3 }} 7$ | M 4 |  |  |
|  | 5 Sa .653 | M 504 | ¢ 1011 | $2{ }^{2} 4$ |  | - 5 |  |  |
|  | 6 S-652 | M 505 | E 1013 | $4 \frac{3}{4} 55_{4}^{1}$ | 1 | N |  |  |
|  | 7 M. 651 | M 506 | E | $5 \frac{1}{1}$ | 149 | $P$ |  | 10 |
|  | 8 Tu. 650 | M 508 | E | $6 \frac{1}{2}$ | 258 | Q 7 |  |  |
|  | 9 W .649 | M 509 | ¢ 1021 | $7 \frac{1}{2}$ | 405 | Q 85 |  | 12 |
|  | 110 Th. 647 | m 510 | E 1023 | - | 507 | Q | 4 Cnc | 13 |
|  | 11 Fr. 6 | M 512 |  | 91 10 | 5 | Q 1056 | Leo |  |
|  | 312 Sa 6 | L 513 | F 1028 | $110 \frac{1}{4} 10 \frac{3}{4}$ | $6{ }^{1} 42$ | P $11_{\mathbf{N}^{\text {P }} 55}$ | Leo | 15 |
|  | 13 S-643 | L\|5 14 | F 1031 | $11111 \frac{1}{2}$ | rises |  |  |  |
|  | 14 M .642 | L 516 | F 1034 | $1 \frac{3}{4}$ | $7{ }^{\text {P }} 04$ | G 12 |  |  |
|  | 15 Tu. 641 | L 517 | F 1036 | $1.0 \frac{1}{4}$ | 823 | I | ir |  |
|  | 16 W .639 | L 15 | F 1039 | 2 1 1 <br> 4   $1^{\frac{1}{2}}$ | 941 | ז 2 |  | 8 |
|  | 817 Th. 638 | L\|5 19 | F:1042 | $22^{2}$ | $10_{\text {M }}^{\text {P }} 5$ | m 325 | Lib | 19 |
|  | 18 Fr. 636 | L 521 | F10 44 | $2^{\frac{3}{4}} 3$ |  | - 4 |  | 20 |
|  | 19 Sa S 635 | L, 522 | F 1 | $23_{4} 4$ | $12^{\text {a }} 14$ |  |  |  |
|  | 20 S- 6 | L 523 | F 10 | $24^{4} 4$ |  |  |  |  |
|  | 21 M. 632 | L 525 | F 1053 | $5 \frac{3}{4}$ | 238 |  |  |  |
|  | 22 Tu. 630 | K 526 | G 1055 | $26^{\frac{3}{4}}$ | 340 | 7 |  |  |
|  | 23 W. 629 | K 527 |  | 27 | 43 |  | Cap |  |
|  | 4 Th. 627 | K 528 | G 1101 | 8 | 515 | P 940 | Ca |  |
|  | 25 Fr. 620 | K 530 | G 1104 | $9 \frac{1}{2} 10$ | 549 | P 1028 |  |  |
|  | 26 Sa Sa 24 |  | G 1107 | $310 \frac{1}{4} 10 \frac{4}{4}$ | $6{ }_{\text {m }}^{\text {A }} 16$ | ~11 | Aqr |  |
|  | $27 \mathrm{~S}-623$ | k. 53 |  |  | sets | -11 | Psc |  |
|  | 28 M: | K/5 | G 1112 | $311 \frac{3}{4}{ }^{1}$ | $6{ }^{\text {P2 }}$ | H 12 |  |  |

## FEBRUARY hath 28 days.



The curved print of the hoof, On the green turf,
will be a scar,
And that will stay, a proof
Of how things were - and are

O, there will be wind-flowers, Edging with blue
The curve, come spring. But the new delicate hours Will not erase this thing,

| $\dot{a}$ |
| :---: |

Aspects, Holidays, Heights of High Water, Weather, etc.

1 Tu. St. Bridget. $\mathbb{C}_{\text {Apo. }}^{\text {ln }}$. Tides $\left\{\begin{array}{l}8.9 \\ 9.4\end{array}\right.$ The 2 W . Purif. of Mary o ¢ $\odot \mathbb{C}_{\mathrm{Eq} .}^{\text {on }}\left\{_{9.1}^{8.9}\right.$ 3 Th. | Gr. Hel. N. Tides |
| :---: |
| $8_{8.7}^{8.9}$ | [2nd \(\begin{gathered}Groundho <br>

Day\end{gathered}\) 4 Fr. 5 Sa.


## MARCH hath 31 days.



The straight ray of the sun Is a deed done:
Clean, and a thing to trust,
Hard at the earth's crust.

1t strikes, it plerces quite
To the earth's night,
Plunging the close dark,
To find its mark:

The small, the trusting seed
That knows her need
And he, after such daring,
Is gentle, and caring.

\section*{| $\dot{8}$ | $\dot{8}$ |
| :--- | :--- |
| $\dot{a}$ | 0 |}

1 Tu. 2 W $3^{\prime} \mathrm{Th}$. 4 Fr . 5 Sa.

Aspects, Holidays, Heights of High Water, Weather, etc.
$\mathbb{C}_{\text {apo }}^{\text {in }} \mathbb{C}_{\text {Eq. }}^{\text {En }}$ Strove Tub, Mardi $\left\{\begin{array}{l}9.1 \\ 9.5\end{array}\right.$
 Tides $\{9.1$

Storm
§ Stat. in Ioe left Charles $\left\{_{\text {River } 19.3}^{9.3}\right.$ threat. Gov. James McConaughy
died 1948 (7th)
1st $\Xi$. I1. Tides $\{9.0$ Strong The Ides Bervare of Hol.
berin Old Colind Cal.' $\frac{8.9}{7.7}$ winds 6 © Iceberg patrol Tides $\left\{\begin{array}{l}8.9 \\ 7.6 \\ \text { starts out }\end{array}\right.$ and ${ }_{7}$ in $\mathbb{C}_{\text {high. Ember Day }}^{\text {runs }}$ Tides $\left\{\begin{array}{l}9.0 \\ 7.8 \\ \text { cold }\end{array}\right.$ Masaryk Tides $\left\{\begin{array}{l}9.3 \\ 8.2\end{array}\right.$
snows, suicide 19.8 Ember Tizard of Es 9.8 rains Blizzard of Ember Tides $\left\{\begin{array}{l}9.8 \text { rains. } \\ 1888 \text { began }\end{array}\right.$ St,Gregory, Ember Day Tides $\left\{\begin{array}{c}10.4 \\ 9.6\end{array}\right.$

 SWC $\mathbb{C}$ an Purim, Income taxes $\{11.4$ Tides $\left\{11.3\right.$. $\left[15^{\text {th }}\right.$ Tenn. indications St, Patrick $\delta \delta \odot \quad \square \widehat{\odot} \odot\left\{\begin{array}{l}11.8 \\ 10.9\end{array}\right.$ of Grover Cleveland
b. 1837 Tides $\left\{\begin{array}{l}11.1 \\ 10.2\end{array}\right.$ Spring. Swallows arrive Tides $\left\{\begin{array}{r}10.7 \\ 9.5\end{array}\right.$ San Capistrano, Cal. 3 ra 9. 31. Spring


 ¢ Gr. Hel. S. Tides $\left\{\begin{array}{l}9.1 \\ 7.8\end{array}\right.$
the
 Longfellow
d. 1882

Anll. Lady Day. Earliest opening Tides $\left\{\begin{array}{l}9.0 \\ 8.6\end{array}\left[25^{\text {th }} \begin{array}{c}\text { Mnd. } \\ \text { Md }\end{array}\right.\right.$
 $69 \mathbb{C} \mathbb{C}_{\text {in }}^{\text {in }}$ if conceived valleys. Tides $\left\{\begin{array}{l}8.8 \\ 7.9\end{array}\right.$ apo. ód © ̧̧ Lat s. $\mathbb{C}_{\mathrm{E}}^{\circ}$ Alaska purch. 1867 Tides $\{\underset{-}{9.2}$ penetrating 1945 warnest
on record Tides $\left\{\begin{array}{l}9.5 \\ 9.1\end{array}\right.$ cold.

## Farmer's Calendar.

Man, what are you doing now shaking your head over broken harness and busted plough points? What were your winter months for but to be getting eyerything ready for spring? Now you are on the wrong foot, and what is the need of it?
With prices what they are on farm machinery, you may have put off ordering that new mower or sprayer. But think twice on this sort of economy if your old equipment is really on its last legs. If you are an orchardist or a crop farmer, you know that the success or failure of your last year's crop may well depend on getting each spray or dust on at just the right time. Even a few hours delay, once, may ruin you. Your equipment doesn't have to be new, but it must be dependable. Why not have two strings to your bow? The wise farmer likes the assur-ance-and insurance-of a reHable tean of horses to fall back on in case something happens to the tractor. And it does.
Many a piece of farm machinery is out of commission for good and rusting now in the scrap heap, and all for want of a few drops of oil or cups of grease at the right time. Make it a rule that neither you nor your men use any piece of machinery without first checking it for grease, oil, gas and water.

ASTRONOMICAL CALCULATIONS.

|  | Days. | $0 \quad 1$ | Days. | $0 \quad 1$ | Days. |  | Days. | 0 | Days. | $0 \quad 1$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| . | 1 | 4N. 37 | 7 | 6-54 | 13 | 907 | 19 | 1114 | 25 | 1315 |
|  | 2 | 500 | 8 | 716 | 14 | 928 | 20 | 1135 | 26 | 1334 |
|  | 3 | $5 \quad 23$ | 9 | $7 \quad 39$ | 15 | 950 | 21 | 1155 | 27 | 1354 |
|  | 4 | 546 | 10 | 801 | 16 | 1011 | 22 | 1215 | 28 | 1413 |
|  | 5 | $6 \quad 09$ | 11 | $8 \quad 23$ | 17 | 1032 | 23 | 1236 | 29 | 1431 |
|  | 6 | $6 \quad 31$ | 12 | 845 | 18 | 1053 | 24 | 1255 | 30 | 1450 |

D First Quarter, 6th day, $8 \mathrm{~h} .01 \mathrm{~m} .$, morning, E.

- Full Moon, 12 th day, 11 h. 08 m., evening, E.
© Last Quarter, 19 th day, 10 h .27 m ., evening, E.
- Ncw Moon, 28th day, 3 h. 02 m., morning, E.

KEY LETTERS REFER TO CORRECTIONS TABLE, PAGE 12. FOR ALL POINTS OUTSIDE NEW ENGLAND.



92 2 Sa. 525 H 612 J 124712 1 $\frac{1}{4}\left|{ }^{-1} \frac{3}{4}\right| 1035$ Q 245 Tau

94 4 M. $522 \mathrm{G} 614 \mathrm{~K} 125213 \cdot 2 \frac{3}{4} 3 \frac{1}{4}-\mathrm{C} .429 \mathrm{G}^{\prime} \mathrm{m}$
955 「u. 520 G 615 K 125513 3 $\frac{1}{2} 4 \frac{1}{4} 12_{\mathrm{m}}^{\text {A }} 44 \mathrm{Q} 526$ Cnc





 I O2 12 Tu. 508 G $623 \mathrm{~K} 13151510 \frac{1}{4} 10 \frac{3}{4}$ rises $-11_{\mathrm{m}}^{\mathrm{P}} 47 \mathrm{Lib} 15$






 rio 20 W. 455 F 632 L 133617 rir 21 Th. 454 F 633 L 133917 rim22 Fr. 452 F 634 L 134217 Ir 323 Sa. 451 F 635 L L 134417 I I 424 S_4 49 E6 636 m 134718 II 5.25 M. 448 E 637 m 13 5018 ri 626 Tu. 446 н 639 m 1352 1810 10 $\frac{1}{2}$

 I 19 29 Fr. 442 由 642 м 1400 18 — 0 $12030|S a|$.441 E. $643 \mathrm{~m}|1402| 18\left|0 \frac{1}{4}\right| 0_{\frac{3}{4}}$


The first leaf - here, And small, and green, Makes a career Of belng seen.

And now, and near, Arrives the bird, For a career
Of being heard.

And I'il stand by, I'm important, here,

- For once . . . the necessary Eye and ear.

| 官 |  | Aspects, Holidays, Heights of High Water, Weather, Etc. |
| :---: | :---: | :---: |
| 1 | Fr . | A day which only Hol. foos observe |
| 2 | Sa. | $\delta 9 \%$ L.H.R. Hol. Tides $\left\{\begin{array}{l}9.6 \\ 8.6 \\ \text { b. } \\ \text { tinued }\end{array}\right.$ |
| 3 | B |  |
| 4 | M |  |
| 5 | l'u. | $\mathbb{C}_{\text {chigh }}^{\text {runs }}$ ( Asterolds ${ }^{\text {a }}$ ( Tides $\left\{\begin{array}{l}9.2 \\ 7.9\end{array}\right.$ |
| 6 | W. | $\underset{\text { Army }}{\text { Day }}$ astray $\quad \begin{aligned} & 9.1 \\ & 7.9\end{aligned}$ Storms |
| r | '[1 | Tides $\left\{\begin{array}{l}9.2 \\ 8.2\end{array}\right.$ |
| 8 | Er. |  |
| 9 | Sa. |  |
| 10 | 8 |  |
|  | M. | $\mathbb{C}_{\text {Eq. }}^{\text {on Arkansas Tornado }} 1944$ \{ 10.8 but nice. |
| 12 | Tu. | 6\%¢ 6 |
| 1 | IV | б¢¢Sup. $\left\{\begin{array}{l}11.1 \\ 11.7\end{array} 122^{\text {th }}\right.$ N. Car. |
|  | T | Passover $\left\{1-9.9\right.$ [13 $3^{\text {th }}$ Mo., Okia., va. |
| 15 | Fr. | (5000 dfri. sk. 1912 \{itic ${ }^{11.6}$ Warmer |
| 16 | S | ¢ 9 ¢ sup. Tices $\left\{\begin{array}{c}11.8 \\ 9.9\end{array}\right.$ with |
| 17 | B |  |
| 18 | M. | Lucy Larcom Hol. $\quad\left\{\begin{array}{l}10.1 \\ 8.5\end{array}\right.$ showers. |
| 1 | '1] |  |
| 2 | 1V. | Funeral 1865 Tindes $\left\{\begin{array}{l}8.9 \\ 7.8\end{array}\right.$ |
| 21 | 'Ih |  |
| 2 | F1. | $\bigcirc$ in Wlitches around tides $\left\{_{8.1}^{8.5}\right.$ |
| 2 | Sa. | St.George. Tides\{ $\left\{_{8.4}^{8.5}\right.$ good |
| 24 | 8 |  |
| 25 | II |  |
| 2 | '1'u. | Hust Day Hol.-Miss. (N. H.) N.H., Fla., Ga. $\left\{\begin{array}{l}8.9 \\ 9.4\end{array}\right.$ days. |
| 27 | W. | ठ ¢ $\quad$ Emerson $\quad$ d. $1882 \quad$ Tides $\left\{\begin{array}{l}8.9 \\ 9.6\end{array}\right.$ |
| 2 | Th. | $\bigcirc$ Partial $\begin{aligned} & \text { ecilpse }\end{aligned}$ ¢O\& $\begin{aligned} & \text { Mars was } \\ & \text { conceived }\end{aligned}\left\{\begin{array}{l}8.9 \\ 9.8\end{array}\right.$ |
| 29 | Fr. | б¢̛C Tides\{-8.8 Unpleas- |
| 3 | Sa. | Bayard kilied Ingolstad 1524 Tides $\left\{\begin{array}{l}9.8 \\ 8.7\end{array}\right.$ ant. |

## Farmer's Calendar.

One swallow doesn't make the spring, nor does the first bluebird nor the first robin. But each is a part of spring, a symbol of it, just as are the wedges of geese flying north. the renewed cawing of the crows, town meeting and mud and marbles, sap buckets and freshets, the sour sinell of lawns, the black pattern of apple tree prunings on melting snows
Anything can be spring. And to each of us it has its special way of coming. To you in the city it comes dancing in with the first hurdy-gurdy. To young Bill here spring is the day Ma lets him shed his red flannels. To Ma it's the day there's nud instead of snow on the kitchen linoleum. Old Dobbin knows it as the day he gets hitched to the plough. And to "Granther"-well, the other seasons liave sort of passed Granther by-but not spring. Spring to Granther is the first long swcet hour when lie sits on the old bench and can smoke and dream again in the sun, remembering how spring, to the little fellow he used to be, was sulplur and molasses.

It always seems to us that the coming of spring is a better time for good resolutions than the first of the ycar. Resolutions have a way of getting snowed under then. But now they're thawed and living. This is the threshold of the growing year. Bring on your good resolves. Scrabble and scratch or get ploughed under.

| 1949] |  | MAY, Fifth Month. |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ASTRONOMICAL CALCULATIONS. |  |  |  |  |  |  |  |  |  |  |
|  | Days. | 0 1 | Days. | $0 \quad 1$ | Days. | $0 \quad 1$ | Days. | 0 | Days. | 0 |
| \# | 1 | 15N. 08 | 7 | 1652 | 13 | 1826 | 19 | 1948 | 25 | $20 \quad 59$ |
|  | 2 | $15 \quad 26$ | 8 | 1708 | 14 | 1840 | 20 | 2001 | 26 | 2110 |
| $\cdots$ | 3 | 1544 | 9 | 1724 | 15 | 1855 | 21 | 2013 | 27 | 2120 |
| $\stackrel{\circ}{\circ}$ | 4 | 1601 | 10 | 1740 | 16 | 1908 | 22 | 2025 | 28 | 2130 |
| $\infty$ | 5 | $16 \quad 18$ | 11 | 1756 | 17 | 1922 | 23 | 2037 | 29 | 2139 |
| 6 | 6 | $16 \quad 35$ | 12 | 1811 | 18 | 1935 | 24 | 2048 | 30 | 2148 |

D First Quarter, 5 th day, 4 h .33 m ., evening, E.
O Full Moon, 12 th.dáy, 7 h. 51 m ., morning, W.
© Last Quarter, 19th day, 2 h. 22 m., evening, W.

- New Moon, 27 th day, 5 h .24 m., evening, W.
key letters refer to corrections table, page 12, for all points outside new england.
 I 3212 Th. 426 D 656 N $14311910 \frac{3}{4} 11$





















The grass came, crowding and abrupt, And startling as a sudden sound: The leaf came, sharp to interrupt A man's brown study of the ground, With a green urgency to spread, Among the dull things in his head.

But least of all was he prepared For the brlght bird-song, the quick note, The singular and sweet that fared Above him . . . And the verse he wrote That evening brought a fashion in From countrles where the man had been

## $\dot{\circ}$ $\dot{\Xi}$ $\dot{\circ}$

Aspects, Holidays, Heights of High Water, Weather, etc.

## Farmer's Calendar.

1B
211.

3 Tu.
4 W.
5 Th.
6 Fr .
7 Sa.
8 B
9.11.

10 Tu.
11 W.
12 Th
13 Fr.
14 Sa.
15 B
16 II.
${ }^{17} / \mathrm{Tu}$
18 W.
19 Th.
20 Fr.
21 Sa.
22 B
23 M.
24 Tu
25 W.
26 Th.
27 Fr.
28 Sa.
29
30 M .
31 「u.
 $\delta^{\prime} \mathbb{C} \mathbb{\gamma _ { \text { Lat. } } ^ { \text { Gr. } } \text { . }}$. $\mathbb{C}_{\text {nigh. }}^{\text {Runs }}\left[1^{\text {st }} h_{\text {R.A. }}^{\text {Stat. in }}\right.$
 Linnaells Hol. b. 1707 R.I. For France, the Army, 9.4 < $\{8.2$ Josedhine"-1821 Corregidn
1942 Kentucky
Derby
3roฐ.a. き. Mother's ర $\Psi \mathbb{C} \mathbb{C} \underset{\text { Eq. }}{\circ \mathrm{on}}$ Tides $\{10.2$ Humid.
 Fred w. Goudy

$$
01977
$$

N.E. first
 War decl on Mexico, 1846 Israel Tldes $\{11.6$ growing tif) 19. .a. $\mathbb{E}$. ( ${ }^{\text {Ridees Father Flanagan }}$ $+11) \approx$. $\mathbb{E}$. (Cow. died 1948 The Nickel
born 15666 $\left[15^{\text {th }}\left\{\begin{array}{c}11,2 \\ 9.5\end{array}\right]\left\{\begin{array}{ll}10.8 \\ 9.0\end{array}\right.\right.$ and

 Waterloo, Tides $\left\{\begin{array}{l}9.4 \\ 1815\end{array}\right.$ planting






 ४in98 Davs Tides $\left\{\begin{array}{l}8,5 \\ 9.5\end{array}\right.$ warmer. $\sigma \delta \mathbb{C}$ Ascension Tides $\{2.5$
 $\delta ఫ \mathbb{C} \quad \delta \not \subset \mathbb{C}$ Tides $\left\{\begin{array}{l}8.6 .1 \\ 8.6\end{array}\right.$
 Memorial Day Joan of Tides $\left\{\begin{array}{c}10,2 \\ 8,6 \\ \text { Arc }\end{array}\right.$ ${ }_{\text {Johnstown }}^{1889} 0 \left\lvert\, \begin{aligned} & 10.2 \\ & 8.6\end{aligned}\right.$ holiday.

Not too late yet to be setting out your young orchards, but remeniler, a tree is never better than the hole in which it is set. All the roots shonld have a cliance to spread freely and uncrowded, the bole dus deeply enough so the first top spread of roots are covered with a coulle of inches of dirt at least and the vertieal roots are not shrugged up. It is a goud plan to use a little cunpowder to loosen the sides of raeh hole, espeeially in clay or hardjan.
A good time now for re forestation as the ground while still moist is not likel. to be wet. Statisties show that that sinee 19226 the total forest acreage planted in the Tnited States was less than $6.500,000$ and there are 7 million aeres in which plantimg is needed. Thourl these figures are mis leading, since on many times 75 million acres nature in doing a hetter job of re seeding than man, still on every farnt there is a aced for some reforesting. Get a forester's advice, however, before starting.
On this business of tree planting. we remember a bit from walter Scott's "Heart of Midlothian": "Joek, when ye hae naithing else to do ye nay be aye sticlimg in a tree; it will be growing, Jock, when ye're sleeping." And you will never be too old to plant a seedling. What matter if you do not see it mature or fruit? No sturdier link to your posterity than a living tree.

## JUNE, Sixth Month.

ASTRONOMICAL CALCULATMONS.

|  | Days. | $0 \quad 1$ | ys. |  | Days. |  | Days. | 0 1 | s. | $0 \quad 1$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 22N. 05 | 7 | 2246 | 13 | 2313 | 19 | 2326 | 25 | 2324 |
|  | 2 | $22 \quad 13$ | 8 | 2252 | 14 | 2517 | 20 | 2326 | 26 | 2322 |
|  | 3 | $22 \quad 20$ | 9 | 2257 | 15 | 23.19 | 21 | $23 \quad 27$ | 27 | 2320 |
|  | 4 | $\begin{array}{ll}22 & 27\end{array}$ | 10 | 2302 | 16 | 2322 | 22 | 2327 | 28 | 2317 |
|  | 5 | 2234 | 11 | 2306 | 17 | 2323 | 23 | 2326 | 29 | 2314 |
|  | 6 | $22 \quad 40$ | 12 | 2310 | 18 | 2325 | 24 | 2325 | 30 | 2310 |

D First Quarter, 3rd day, 10 h .27 m ., evening, W. O Full Moon, 10th day, 4 h .45 m. , evening, E.
$\mathbb{C}$ Last Quarter, 18 th day, 7 h. 29 m., morning, W.

- New Moon, 26th day, 5 h. 02 m., morning, E.

KEY LETTERS REFER TO CORRECTIONS TABLE. PAGE 12. FOR ALL POINTS OUTSIDE NEW ENGLAND.

 ${ }^{\mathrm{I}} 53$ 2 Th. 409 в 716 р $1507182^{\frac{3}{4}} 3 \frac{1}{2}-4-459$ Leo







r6ı 10 Fr .406 b 721 P $15151610 \frac{1}{2} 10 \frac{3}{4}$ rises -Midn Sag 14



I65 14 Tu. 406 b 723 Q $\left.1517161 \frac{1}{4} \right\rvert\, \frac{3}{4} 1052$ o 252 Aqr 17
r6615 W. 406 A 723 Q 151715 2 $2 \frac{3}{4} 1115 \mathrm{~m} / 342$ Aqr 18
I67 16 Th. 406 A 724 Q $151815 \cdot 2 \frac{3}{4}-3 \frac{1}{2} 1139$ L 427 Psc 19
r68 17 Fr. 406 A 724 Q $1518153_{\frac{3}{4}}^{\frac{3}{4}} 4 \frac{1}{4} 11_{\mathrm{M}}^{\mathrm{P} 5} \mathrm{~F}$ J 509 Psc 20
r69 18 Sa. 406 A 724 Q 15 1S 15 4 $4 \frac{1}{2} 5_{\frac{1}{4}}$ — -548 PSc 22

r 7 I 20 M .406 A 725 Q $1519146 \frac{1}{4} 6 \frac{3}{4} 1233$ G 706 Ari 24

r 7322 W. 407 a 725 Q 1519148 S $\frac{1}{2} 114$ D S 31 Tau 26



${ }^{1} 7726$ S_ 408 A 726 Q $15181311 \frac{1}{4} 11 \frac{1}{4}$ sets $-12_{\mathrm{M}}^{\mathrm{P}} 04$ Cnc 0
${ }^{1} 7827 \mathrm{M} .408$ A 726 Q $151813-0 \quad 9_{\mathrm{m}}^{\mathrm{P}} 09 \mathrm{Q} 103 \mathrm{Cnc} 1$





Lovely and fragrant, the young day Wanders . . . wanders ... unaware Ot self, and unaware of eyes Upon her, and how each small thing Shines freshly, shines in a new way:

It is because of her the alr Brightens, now, and the blue wing Is bluer for the young, unwise Loving look of the young day.

| $\dot{غ} \dot{\Leftrightarrow}$ | Aspects, Holidays, Heights of High Water, Weather, etc. |
| :---: | :---: |
| 1/V. | die. |
| 2 Th | 62a 6if |
| 3 Fr . | Shavaoth Confederate |
| 4 Sa . | Jeremy belknap Tides $\{9.4$ Rain |
| 5 B |  |
| 6 M. | d $\Psi \mathbb{C} \underset{\substack{\text { Invasion } \\ 1941}}{\text { Tides }}\left\{\begin{array}{l}9.7 \\ 10.4\end{array}\right.$ and |
| 7 Tu . |  |
| 8 W. |  |
| 9 Th . |  |
| 10 Fr . | $\underbrace{\text { Day }}_{\text {Ember }}$ Invasion $\begin{aligned} & \text { Moon } \\ & \text { M Tides }\end{aligned}$ |
| Sa | St. Barnabas. $\mathbb{C}_{\text {low }}^{\text {rides }}$ Ember ${ }_{\text {Day }}$ (ides |
| 12 B |  |
| 13 M . | $\delta$ in $\delta \delta \Psi \mathbb{4} \begin{gathered}\text { pierced } \\ \text { now }\end{gathered}$ |
| 14 Tu |  |
| 15 W |  |
| 16 Th. |  |
| 17 Fr. |  |
| 18 Sa . | $\mathbb{C}_{\text {Eq. }}^{\text {On }}$ White frost Tides $8_{8.4}^{8.5}$ Cooler |
|  |  |
| 20 M. |  |
| 21 Tu . |  |
| W. | $\bigcirc \widehat{\circ}{ }^{\circ}{ }^{\text {Chas. A. }}$ |
| 23 Th . |  |
| 24 Fr. |  |
| 25 Sa . |  |
| 26 B |  |
| 27 M . |  |
| 28 'Tu. |  |
| 29 W. |  |
| 30 Th. |  |

Coldest June on record, 1897

Farmer's Calendar.

There is nothing better on a fine June dawning when all the world ought to be up and doing anyway, than to hear the crowing of a rooster. Or the crowing of many roosters. But we know this feeling is not universal even among countryfolk. We remember how, a few years ago, our neighbor Brown took an aversion as sudden as it was violent to the clarion of our old Plymouth Rock.
Now it did seem peculiar that Brown should get touchy over that bird, for in other respects he was a good-natured, even congenial, man. Indeed it was these qualities and a fondness for mulled cider that led him, one winter cuening when we were cozy about the hearth, to a confession that cleared up the niystery
It seems that a few years back he had fared badly in a horse trade, much to the delight and amusement of his frtends, for Brown openly prided himself on his knowiedge of horseflesh. "old Brown sure took a trimming" was the consensus of opinion, and that remark buzzed through the poor fellow's head all the long summer night. Just before dawn he dozed off at last only to find himself sitting suddenly bolt upright histening to the crow of the old rooster.
"That derned bird," he said, "wasn't giving out any regular 'cock a-doodle,' but as plain as day-Old Brown he took a trimming,' and. by God, that's what he's hollered at me every morning since."

1949] JULY, Seventh Month.
ASTRONOMICAL CALCULATIONS.


D First Quarter, 3rd day, 3 h. 08 m., morning, W.
O Full Moon, 10th day, 2 h. 41 m., morning, W.
© Last Quarter, 18th day, 1 h. $01 \mathrm{~m} .$, morning, E.

- New Moon, 25th day, 2 h. 33 m., evening, W.
key letters refer to corrections table page l2, for all points outside new england.








 190 9 Sa. 415 в 723 Р $15081110_{4}^{1} 10_{\frac{1}{2}}^{4} 3_{\mathrm{m}}^{4} 03$ в $111_{\text {P }} 46$ Cap 14 191 10 S-4 16 B 723 P $15071111 \frac{1}{4} 11 \frac{1}{4}$ 192 11 M. 417 B 722 P $150610-0 \quad S_{\mathrm{N} 51}^{\mathrm{F} 5} \mathrm{P} 12 \times 41$ Cap 15



 19716Sa. 421 B 719 P 145910 3 $3 \frac{1}{2} 1037$ H 423 Ari 20
 I99 1S M. 422 B 7 1S P $1456104_{4}^{\frac{4}{3}} 5 \frac{1}{4} 1116$ E 542 Ari 22

 20221 Th. 425 c 716 o $1451107_{2}^{1} 77_{4}^{4} 12 \wedge 10$ A 759 G'm 25
 20423 Sa. 427 ¢ 714 o $1447.9 \left\lvert\, 9 \frac{1}{4} 9 \frac{1}{2} 135\right.$ A 950 Cnc 27


 20827 W. 431 c 710 o 1439 9





See his house
Under the hill．
Disguised as mavle
And plne and stone－
With nought to show
The blood built in，
And heart，and muscle，
And brain，and bone
シ
Aspects，Holidays，Heights of High Water，Weather，etc．

## Farmer＇s Calendar．

1｜ Fr ．Rommel
2 Sa．V．of Mary．$\bigoplus_{\text {Apli．}}^{\text {in }} \mathbb{C}_{\text {Peri．}}^{\text {in }} \mathbb{C}_{\text {Eq．}}^{\text {on }}\left\{\begin{array}{c}10.1 \\ 9.8\end{array}\right.$
3 B 3rðミ．a． $\mathbb{C}$ ．$\delta \Psi \mathbb{C}\{9.8$ Change－ 4 M．Ind．Day $\square \Psi \odot$ Tides $\{10.1$ able． 5 Tu． P．T．Barnum born 1810 6 W ． 7 Th． Circus Fire 1944 Tldes $\left\{\begin{array}{l}9.2 \text { Showers } \\ 10.6 \\ \text { Show }\end{array}\right.$ 8 Fr． St．Frances Cabrini Tides $\left\{\begin{array}{c}9.1 \\ 10.8\end{array}\right.$
Liberty Bell
cracked 1835
Tides $\left\{\begin{array}{c}9.2 \\ 10.9\end{array}\right.$
9 Sa.
10 B
11 M．
12 Tu.
13 W.
14 Th．
15 Fr ．
$\mathbb{C}^{\text {Rides D．S．Medal }} 9.2$ expectéd Ch ${ }^{\text {ave }}$ auth． 1918110.9 Death ${ }^{9.3}$


 Great Fire Hol．Tides $\left\{\begin{array}{l}\text { H．} \\ \text { O．8 }\end{array}\right.$ tween
 St，SWithna Ralned 40 Days Tides $\left\{\begin{array}{l}9.5 \\ 9.9 \\ 8.5\end{array}\right.$
16 Sa.
17 B
18 M.
19 Tu．
20 W.
21 Th.
22 Fr ．
23 Sa ．
24 B
25 M ． 26 Tu.
27 W．
28 Th.
29 Fr ．
30 Sa ．
31 B $\underset{1879.1944}{\text { Stormy }} \mathbb{\text { apo }}{ }_{\text {in }}^{\text {© }} \mathbb{C}_{\text {Eq．}}^{\text {on }}\left\{\begin{array}{l}9.0 \\ 8.8 \text { spells．}\end{array}\right.$ 5thฐ．a．T．

Tides $\left\{\begin{array}{l}8.7 \\ 8.6\end{array}\right.$
Rome burned
A．D． 64
Tides $\left\{\begin{array}{l}8.2 \\ 8.7\end{array}\right.$
Clear
 St．Margaret． $821 \odot$ Tides $\left\{_{8.9}^{7.7}\right.$ for Daniel
Mary Magdalene．
Tides $\{9.7$
 7thฐ．af．fly St．James \＆St．Chrls．$\delta \underset{y}{ } \mathbb{C}$ © Tides $\left\{\begin{array}{c}1.8 .8 \\ 10.6 \\ \hline\end{array}\right.$ б卆〇Sup．THes $\left\{\begin{array}{l}9.3 \\ 10.9\end{array}\right.$ Muggy
 d．N．Charter app＇d． $\mathbb{C}_{\text {Pert }}^{\text {in }}$ STldes $\{11.0$ 1st Almanac $\not \subset$ Gr．Hel． $\mathbb{C}_{\text {En }}^{\text {on }}\{11.0$ it


 Now as your streams and marshy spots are probably approaching their driest con－ dition is the best time to put， in dams or make＂fire holes．＂ It is not only easier to work unhampered by too much flowace，as in the case of streams，but you can judge now at this dry time where ＂holes＂may be put that are certain to carry water throughout the summer．Noth－ ing can stop a young，fast－ spreading brıshl fire faster than the combination of good ＂fire holes，＂a portable pumper，and two or three thousand feet of hose．Ask any country fire chief．
Your eorn fields need nitro－ gen in July，for this is the period when growth is most rapid，and the time when the crop needs nitrogen corre－ sponds with its rate of growth．This month your crop consumes $60 \%$ of the nitrogen it requires．
Now you should be re－ planting in your vegetable yarden．as many of the early crops have poue past．Beans （green or yellow bush），car－ rots，beets，and white and yellow turnips．From sowings made in late May or early June，late cabbage，cauli－ flower and Brussels sprouts can be transplanted to a permanent location．
Not the best month for fishing．More colds than trout will be caught，thanks to red hot sidewalks vs．super air conditioning，and the special brand of midsummer madness that maketh the sweat $y$ toiler to lie down in the chol shade on the damp





O Full Moon, 7th day, 4 h. 59 m., morning, W.
© Last Quarter, 15 th day, 9 h. 29 m., morning, W.

- New Moon, 22nd day, 7 h. 21 m., morning, E.

D First Quarter, 28th day, 11 h .18 m ., evening, W.
KEY LETIERS REFER TO CORRECTIONS TABLE, PAGE 12, FOR ALL POINTS OUTSIDE NEW ENGLAND.

 ${ }^{2} 45$ 2 Fr. 509 ต 618 к 1308167
${ }^{2} 46$ 3 Sa. 510 G 616 K 1305168
247 4 S_ 512 G 614 к 130317
248 5 M. 513 G 612 к $1300179_{4}^{3} 10$
$7 \frac{1}{4}-828$ Cap 10

305 d 1056 Aqr 13
2496 Tu. 514 G $611 \mathrm{~K} 12571710 \frac{1}{2} 10 \frac{3}{4} 44_{\mathrm{M}}^{\wedge} 11$ E $11_{\mathrm{Mn}}^{\text {P }} 38$ Psc 14
${ }_{2} 50$ 7 W. 515 g 609 к $12541811 \frac{1}{4} 11 \frac{1}{2}$ rises |- - -

 25310 Sa. 518 н 604 Ј 124619 01 121823 F 136 Ari 17 ${ }^{2} 5411$ S_ 519 н 602 J $1243191 \frac{1}{4} 1 \frac{1}{2} 743$ D 216 Tau 18 ${ }^{2} 5512$ M. 520 н 600 J 124020 2 $2 \frac{1}{4}$ \& 08 в 258 Tau 19

 ${ }^{2} 5^{8} 15$ Th. 523 н 555 J 123221 4 $4 \frac{1}{4} 4 \frac{1}{2} 1003$ A 524 G'm 22 ${ }^{2} 5916$ Fr. 524 甘 553 J 122921 5 $\frac{1}{4} \left\lvert\, 5 \frac{1}{2} 11_{\mathrm{M}}^{\mathrm{P}} 02\right.$ A 620 Cnc 23 26017 Sa .525 н|5 51 Ј $1226216_{4}^{1} 6_{2}^{1}$ —— 717 Cnc 24
 $26219 \mid$ M. $26_{3} 20$ Tu. 528 I $546 \times 121822 \mid 9$ $26_{4} 21$ W. 530 r 544 r $1215231010 \frac{1}{4}$ 26522 Th .531 I 543 r $12122310 \frac{3}{4} 11$ 26623 Fr. 532 I 541 I $12092311 \frac{1}{2}$ -


 27027 Tu. 536 1 534 r 115825 2 $2 \frac{1}{2} 2 \frac{3}{4}$
 27229 Th. 538 I 530 r 115225 27330 Fr. 539 J $\mid 528$ hl 114926.


Observe the amorous eve, Wbose loves are muluiform: No shape of earth or sk ${ }^{\circ}$ But wakes the thin, sweet storm Of love in the wanton eye.

The apple-flower in May,
The bare branch, black and wet, Are love in the eye's way Of loving - to forget
What were the ${ }^{\text {boughs of May }}$

- Or anything gone by -

To the amorous, wanton eye?

## $\dot{j}$ Aspects, Holidays, Heights of High Water, Weather, etc.


 3 Sa. Manchester, N.H. Tides $\{8.8$ gen4 B 12tl) §. a. ©. Tides $\left\{\begin{array}{l}8.5 \\ 9.5 \\ \text { erally }\end{array}\right.$ 5.1L. Labor Day. Tides $\{9.8$ nice. 6 Tu. 9 in $88 \begin{gathered}\text { Worst bay } \\ \text { fever now }\end{gathered}$
 8 Th . Nat, of Mary, $\mathbb{C}_{\text {En }}^{\text {on }}$ Tides $\{9.5 \mathrm{rain}$ 9 Fr . d. 1947 Cal. $\{9.6$

10 Sa .
11 B
12 M .
13 Tu.
14 W.
15 Th.
16 Fr .
17 Sa.
18 B
19 M .
20 Tu .
21 W. 22 Th .
23 Fr .
24 Sa.
25 B
26 M .
27 Tu .
28 W. 29 Th. Michaelmas. Nitamy hriricane
30 Fr. $\delta \not \subset \mathbb{C}$ Tides $\left\{_{9.2}^{8.2}\right.$ Much cooler.

It used to be that a man's ladder was a pleasant thing, his own, as comfortable to him as pipe or dog. It made him know his strength and be proud of to lift that twen-ty-five foot monstrosity-lomemade-that hung along the barn wall. Ile loved every clumsy rung of itloved it the more that it was awkward and heavy, for despite this he was its master and he could set it with ease where he would. Lesser men might stagger and strain and wrunt to raise it-and fail. Not he. This was a man's ladder. IIis.

But that was yesterday, a pretty long ago vesterday, and thonmh there is still plenty of use for ladders, the ladier as a personality, a loved thing, belongs to the horse and buggy era. To-day we have new and extremely light metal ladders-"easy ladders"-that are just the thing for orchard work. Even the youmg sprouts that call themselves apple pickers (God knows why) will be able to handle these. lsut the demand for these ladders remains greater than the supply. If you can't get them, isn't there sompone in your town that can still turn out those good old-fashioned split spruce ladders? Why not figure to inake yourself some next winter. If you do, be $\left\{\begin{array}{l}9.2 \\ 10.1\end{array}\right.$ sure to cut your trees now $\{8.6$ that you may liave a chance \{9.6 to split and dry them before you tackle the job of putting the rungs in.

| 1919] |  | OCTOBER, Tenth Month. |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ASTRONOMICAL CALCULATIONS. |  |  |  |  |  |  |  |  |  |  |
|  | Days. |  | Days. | $0 \quad 1$ | Days. | 0 | Days: | 0 | Days. | 0 |
| $\stackrel{0}{\pi}$ | 1 | 3s. 15 | 7 | 534 | 13 | 750 | 19 | 1002 | 25 | 1210 |
| - | 2 | $3 \quad 38$ | 8 | 557 | 14 | 812 | 20 | 1024 | 26 | 1230 |
| \% | 3 | $4 \quad 01$ | 9 | 620 | 15 | 835 | 21 | 1045 | 27 | 1251 |
| ค | 4 | $4 \quad 25$ | 10 | 642 | 16 | 857 | 22 | 1107 | 28 | 1311 |
|  | 5 | 448 | 11 | 705 | 17 | $9 \quad 19$ | 23 | 1128 | 29 | 1331 |
| $\bigcirc$ | 6 | $\begin{array}{ll}5 & 11\end{array}$ | 12 | 728 | 18 | 941 | 24 | 1149 | 30 | 1350 |

O Full Moon, 6th day, 9 h. 52 m., evening, E.
© Last Quarter, 14th day, 11 h. 06 m., evening, E.

- New Moon, 21st day, $4 \mathrm{~h} .23 \mathrm{~m} .$, evening, W.

D First Quarter, 28th day, 12 h. 04 m., evening, E. key letters refer to corrections table, page i2, for all points outside new england.




 278 5 W. 545 J 520 H 11352710 10 $\frac{1}{4} 4_{41}^{A} 09$ H 1057 Ari 14 2796 Th. 546 J 518 n $11322810 \frac{3}{4} 11$ rises - 1135 Ari 15 $280 \quad 7 \mathrm{Fr} .547$ J $516 \mathrm{H} 11292811 \frac{1}{4} 11 \frac{1}{2}$ 28 I 8 Sa. 548 J 515 H 112728113 282 9 S_ 549 J 513 H $1124280 \frac{1}{4} 0 \frac{1}{4}$ $28310 \mathrm{M} .550 \mathrm{~K} 511 \mathrm{G} 1121290_{\frac{3}{4}}^{3}$



 28815 Sa. 556 к 503 G $1107304 \frac{3}{4} 5$ 28916 S_ 557 K 502 G $1104305^{\frac{3}{4}}$ 29017 M. 559 K 500 G 1102306 $29 \mathrm{I} 18 \mathrm{Tu} .600 \mathrm{k} 459 \mathrm{G} 1059317^{\frac{3}{4}}$
 29320 Th. 602 K 455 F $1053319 \frac{1}{2} 9_{\frac{3}{4}}^{2}$ 29421 Fr. 603 L 454 F $10513110 \frac{1}{4} 10 \frac{3}{4}$ 29522 Sa: 604 L 452 F 10483111 11 $\frac{1}{2}$ 29623 S. $606 \mathrm{~L} 451 \mathrm{~F} 10453111 \frac{3}{4}$ — 29724 M. $607 \mathrm{~L} 450 \mathrm{~F} 1043320 \frac{1}{2}$ 29825 Tu. 608 L 448 r 104032 1 $\frac{1}{4}$ 29926 W .609 L 447 F $1037322_{4}^{1}$ 30027 Th. 611 L 445 F 1035323 301 28 Fr. 612 L 444 r 1032324 30229 Sa. 613 L 442 F $1029325 \frac{1}{4}$ 30330 S- 614 L 441 e 102732 30431 M. $616 \mathrm{M}|\mid 40$ E 102432 7䨙|

| OCTOBER hath 31 days． |  |  |
| :---: | :---: | :---: |
|  |  |  |
| Loving their stilled reflectlon in the pool， How nothing at $:=11$ ls halif so beautiful； |  |  |
| They loiter，lovely，at the grassy brink， Like women spelled with love，and grave and cool， Themselves the sweetest waters that they drink． |  |  |
| 安官 | Aspects，Holidays，Heights of High Water，Weather，etc． | Farmer＇s Cale |
| 1 Sa． |  |  |
| ${ }_{2} \mathrm{~B}$ |  | Brisk October nips each leaf－the rusty elm，the scar－ |
| M． |  | let maple，the pale platinum |
| Tu | St．Fr，of Assisi． | and each comes fluttering down to the earth cover that |
| W． |  | grows richer each year for |
| Th． |  | the death and decay of un－ |
| ${ }^{7} \mathrm{Fr}$ ． |  | leaves． <br> If you would see the life |
| Sa． | Succoth $6 \Psi \bigcirc \bigcirc \bigcirc$ | of your forest－yese，and hear |
| B | 18th S．a．l3．Abraham ${ }^{\text {St．Denis }}$ \｛9．17 cool ${ }^{\text {a }}$ | it－go to the beech knols． |
| 10 M ． |  | tinuous scuffle and scattering in the leaves where the beech |
| 11 Tu |  | in the leaves where the beech nuts hide．There，too are the partridges and the jays． |
| 12 W |  | the partridges and the jays． |
| Tb |  | ridges the deer will nuzzle |
| F1 |  | along under the trees，feeling out with their sensitive lips |
| Sa． |  | the triangular hardness of |
| B |  | bears will make crunching |
| M． | $\square 2 \mathcal{} \odot$ ठ ठ © T Tides $\left\{_{9.5}^{8.5}\right.$ this | feasts in the darkness．${ }^{\text {as }}$ |
| 18 Tu | St．Lakge $\quad$ ¢ $2 \mathbb{C}$ | picked in the orchards，look o protecting your young fruit |
| 19 W. |  | trees for the winter．Be sure |
| 20 Th |  | that the hase of each young tree is kept free of litter， |
| 21 Fr ． | $\bigcirc \bigcirc_{\text {Eartial }}^{\text {Palt }}$ | and that each tree las an |
| 22 Sa | U．or Pa． |  |
| 23 B | 20th⿹ ．a．险．World created 4004 B．C． | around its trunk．Have the wire three or four inches in－ |
| 2.1 M ． |  | to the soil These are pre－ |
| 2.5 Tu. |  | cautions ayainst is serions，use |
| 26 W. |  | poison．Put a small amount of poisoned grain in a tin |
| 27 Th． |  | can whose cover is pushed |
| 28 Fr ． |  | in far enough for mice to |
| 29 Sa. |  | larger animals．Place a can under each tree．Short，stout |
| 30 B |  | planks with the grain under |
|  |  |  |


| 1949] |  | NOVEMBER, Eleventh Month. |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ASTRONOMICAL CALCULATIONS. |  |  |  |  |  |  |  |  |  |  |
|  | Days. | $0 \quad 1$ | Days. | 0 | Days. | 0 | Days. | 0 | Days. | $0 \quad 1$ |
| 연 | 1 | 14s. 29 | 7 | 1620 | 13 | 1801 | 19 | 1930 | 25 | 2047 |
| 品 | 2 | $14 \quad 48$ | 8 | 1638 | 14 | 1817 | 20 | 1944 | 26 | 2059 |
| \% | 3 | 1507 | 9 | 1655 | 15 | 1832 | 21 | 1958 | 27 | 2110 |
| $\stackrel{\square}{\square}$ | 4 | $15 \quad 26$ | 10 | 1712 | 16 | 1847 | 22 | 2011 | 28 | 2121 |
| $\stackrel{\sim}{\circ}$ | 5 | 1544 | 11 | 1728 | 17 | 1902 | 23 | 2023 | 29 | 2131 |
| $\bigcirc$ | 6 | 1602 | 12 | 1745 | 18 | 1917 | 24 | 2036 | 30 | 2141 |

O Full Moon, 5th day, 4 h. 09 m., evening, E.
© Last Quarter, 13 th day, $10 \mathrm{~h} .47 \mathrm{~m} .$, morning, W.
New Moon, 20th day, 2 h. 29 m., morning, E.
D First Quarter, 27th day, 5 h .01 m ., morning, W. KEY LETTERS REFER TO CORRECTIONS TABLE, PAGE 12, FOR ALL POINTS OUTSIDE NEW ENGLAND.



 3084 Fr .620 m 435 E 10143210 10 $\frac{1}{2}$ rises - 1055 Tau 14 3095 Sa. 622 m 434 E $10123210 \frac{3}{4} 11$ $4_{\mathrm{M}}^{\mathrm{P}} 16 \mathrm{D} 11_{\mathrm{M}}^{\text {p }} 38$ Tau 15 $310 \quad 6 \mathrm{~S}-623 \mathrm{M} 432 \mathrm{E} \left\lvert\, 10093211 \frac{1}{4} 11 \frac{3}{4}\right.$ उII 7 M. $624 \mathrm{M} 431 \mathrm{E} \left\lvert\, 10073211 \frac{3}{4}-\right.$ 3 32 8 Tu. 625 m 430 Е $1005320 \frac{1}{2} 0 \frac{1}{2}$

314 10 Th. $628 \mathrm{~N} 428 \mathrm{D} 1000321_{4}^{\frac{3}{4}} 11^{\frac{3}{4}}$
 31612 Sa. 631 N 426 D 95532 3 $\frac{1}{2} \left\lvert\, 3 \frac{1}{2} 1006\right.$ b 451 Leo 22

 3 г $915 \mathrm{Tu} .634 \mathrm{~N} 423 \mathrm{D} .949316 \frac{1}{4} .6$ 32016W. 635 N 422 D 32 I 17 Th. 637 N4 41 D 32218 Fr. 638 N 421 D 32319 Sa .639 N 420 D $941309_{\frac{3}{4}} 10_{2}^{\frac{1}{2}}$ 324 20 S_640 o 419 c $9393010 \frac{3}{4} 11 \frac{1}{4}$ 32521 M. 642 o 418 c $9373011 \frac{1}{2}$ — 32622 T. 643 o 418 c 32723 W .6440417 c 32824 Th. 6450416 c 32925 Fr. 6460416 C 33026 Sa. 648 o 415 C 33127 S_ 649 o 415 c 33228 M. 650 o 415 c




> November, beyond grieving, is grown bold,
> In eye and posture, bold: settled $\ln$ lack,
> No longer weeping with leaves - the leaves gone:
> The alr not soft with sorrow, the alr cold,
> And clear in knowledge that no leaf comes back,
> That once has fallen away .., that lack stays on.
> Such are the bold toward time; they fear him not. -
> What could time do to lack, which is their lot?

| $\dot{E}$ $\dot{Q}$ | 8 | Aspects, Holidays, Heights of High Water, Weather, otc. | Farmer'a Calendar. |
| :---: | :---: | :---: | :---: |
|  |  | All Saints Day. ${ }_{\text {L }}^{\text {Lol. }}$ La. $\quad$ Tides $\left\{\begin{array}{ll}8.6 \\ 8.6\end{array} \quad I t\right.$ | We hope thls year that |
|  |  |  | you have fall-seeded some kind of crop cover for your |
|  |  |  | bare fields. Again, it is the eternal question of erosion. |
|  |  | Hunter's Moon ( 5 th ) Tides $\left\{\begin{array}{l}9.4 \\ 8.8\end{array}\right.$ snow. | We've got to cover our soil |
|  | $\mathrm{Na}$ | Fawkes Gunpowder Plot Tides $\left\{\begin{array}{l}9.6 \\ 8.7\end{array}\right.$ | or lose it. <br> Most of us think of water |
|  | B |  | erosion as taking place only where the land slopes so |
|  |  | No. Arrica inv. 1942 Tides $\left\{\begin{array}{l}9.8 \\ \hline\end{array}\right.$ | much that quantities of soll |
|  | T | Election Day, Tides $\left\{\begin{array}{l}8.5 \\ 9.8\end{array}\right.$ Time | are washed, or gullyed, away. In our bare fields after rain |
|  |  | $6 \oint \mathbb{C} \mathbb{C}_{\text {high }}^{\text {Runs }}$ THdes $\left\{\begin{array}{l}8.4 \\ 9.7\end{array}\right.$ to | we look for the miniature |
|  | 'I' |  | canyons through which tumbled tiny Colorados brown |
|  |  | Armistice Day $\left\{\begin{array}{l}8.1 \\ 9.4\end{array}\right.$ your | with our top soil. And, of course, we can always go out |
|  |  | St. Martin. Tides $\left\{\begin{array}{l}8.1 \\ 9.3\end{array}\right.$ | the north pasture to the great water-washed gully-long as |
|  |  | 22 n -5.a. (1. Indian Summer beglns $\quad\left\{\begin{array}{l}8.2 \\ 9.2\end{array}\right.$ | water-washed gully-long as the barnyard. Overgrazing on |
|  |  | $60 \mathbb{A c}$ America ext to Paclici 1805 $\quad\left\{\begin{array}{l}86 \\ 9.3\end{array}\right.$ Cold | a sliarp slope started tliat. But there is another kind of |
|  | Tu |  | eroslon-"splash" erosion, so known when most of the |
|  |  | Okia. adm. to Unlon, 1907 $\mathbb{C}_{\text {Eq. }}^{\text {on }} \quad\left\{\begin{array}{l}9.7 \\ 9.8\end{array}\right.$ winds. | known when most of the |
|  | ' | $6 \pm \mathbb{C}$ | is caused by raindrop splashes and little if any by the scour- |
|  |  | Great No. Am. quake 1755 $\mathbb{C}_{\text {Peri }}^{\text {in }}$ ( ${ }^{11.0} 10.8$ Signs | ing action of surface flow. We |
|  | S | Coast of Chile rose 3 it. 1822 Ttdes $\left\{\begin{array}{l}11.5 \\ 10.4\end{array}\right.$ | find then the soil under sticks and stones, where rain can- |
|  |  |  | not strike, is undisturbed. Take a look at your uncovered |
|  | M | $6 \zeta \bigcirc$ Sup. $\left[20{ }^{\text {th }}\right.$ Important people $\left.{ }^{\text {born this day }}\right]$ | fields aftor a very heavy rain. |
|  | ${ }^{\prime}$ |  | Every stick or stone will be held up by its own little col- |
|  | , |  | umn of earth. The surface of the field has been literally |
|  | ' | Thanks. Day. $62 \mathbb{C}$ [ ${ }_{10,3}^{9.3}$ snow or | "splashed" down. Clods and |
|  | H | Gale - Tides $\left\{\begin{array}{l}8.8 \\ 1888\end{array}\right.$ | crumbs of soil have been broken up and there has been |
|  | S | Total storm Tldes $\left\{\begin{array}{l}8.5 \\ 9.2\end{array}\right.$ | a tendency to carry off the fine and light part of the |
|  |  |  | soil. Another result of |
|  |  | $\left\{\begin{array}{l}8.8 \\ 8.3\end{array} 7^{\text {th }}\right.$ Week long hurricane $]$ here | "splash" is that the beating drops so muddy the surface |
|  | ' |  | flow that they really seal off |
|  | W | StiAndrew. 6 ot 2 Tides $\left\{\begin{array}{l}8.6 \\ 8.1\end{array}\right.$ stay. | the surface, and thus invite, even on the slightest slope, an |
|  |  | mber 1889 holds rain record- $9.82^{\prime \prime}$ | ssive |



O Full Moon, 5th day, 10 h. 13 m., morning, W.
© Last Quarter, 12th day, 8 h. 48 m., evening, E.

- New Moon, 19th day, 1 h. 55 m., evening, W.

D First Quarter, 27 th day, 1 h .31 m ., morning, W. KEY LETTERS REFER TO CORRECTIONS TABLE, PAGE 12, FOR ALL POINTS OUTSIDE NEW ENGLAND.

 336 2 Fr. 6540413 c 337 3 Sa. 6550413 c $33^{8}$ 4 S_656 of 43 c 3395 M. 657 P 412 B 3406 Tu. 658 P 412 в 34 r 7 W .659 P 412 в 3428 Th. 700 P 412 в 343 9 Fr. 701 P 412 в 34410 Sa .702 p 412 в 34511 S. 703 P 412 B 34612 M. 704 P 412 в 34713 Tu. 704 r 413 в 348 14 W .705 P 413 в 34915 Th. 706 P 413 B 35016 Fr .707 Р 413 в 35117.Sa. 707 P 414 B $35^{2} 18$ S_708 P 414 в 353 19 M. 708 P 414 B 35420 Tu. 709 P 415 в 35521 W. 710 P 415 B 35622 Th. 710 P 416 B 35723 Fr. 711 r 416 в 35824 Sa. 711 P 417 B 35925 S. 711 P 418 B 36026 M. 712 Р 418 в 136 г 27 Tu. 712 р 419 в 36228 W. 712 Р 420 в 36329 Th. 713 -p 421 в 36430 Fr. 713 Р 422 в 36531 Sa. 713 r $_{1} 123$ B

$918+26 \quad 9 \frac{1}{2} 10 \quad 502$ o 1020 Tau 14
$9162510 \frac{1}{4} 10 \frac{3}{4}$ 6 $6_{\mathrm{M}}^{1} 07$ Q $11_{\mathrm{M}}^{\text {P }} 10$ G'm 15
$9152510 \frac{3}{4} 11 \frac{1}{4}$ rises
$9142511 \frac{1}{2}-4{ }^{4} 40$ A $12 \times 02$ G'm 16

| 91324 | 0 | 0 | 5 | 39 | A 1257 Cnc 17 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

$912240_{0}^{\frac{3}{4}} \quad 0 \frac{3}{4}-645 \mathrm{~A} \quad 153 \mathrm{Cnc} 18$

| 91123 | $1 \frac{1}{2}$ | $1 \frac{1}{2}$ | 757 | B | 247 Cnc | 19 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |


$9092233^{\frac{1}{4}} 1023 \mathrm{~F} 430$ Leo 21
$909223 \frac{3}{4} 4 \frac{1}{4} 11$ P36 H 518 Vir 22 $908224 \frac{3}{4} 5 \frac{1}{4}-605 \mathrm{Vir} 23$
$908215 \frac{3}{4}-6 \frac{1}{4} 12{ }^{\text {a }} 50$ 工 653 Lib 2
$907216 \frac{3}{4}-7 \frac{1}{4} \quad 205 \mathrm{~K} 742 \mathrm{Lib} 25$


$90619 \quad 9 \frac{1}{2} 10$
$9061910^{\frac{1}{4}} 11$
$9061811 \frac{1}{4} \cdot 1 \frac{3}{4}$
90618 - 0
$30617 \quad 0 \frac{3}{4} \quad 0 \frac{3}{4}$
90617 1六 $1 \frac{3}{4}$ S 30 E 323 Aqr
90616


| DECEMBER hath 31 days. |  |  |
| :---: | :---: | :---: |
|  |  |  |
| Made pensive by the way of snow: <br> - Tbe wavering. uncertain, slow Over tbe scarred, uneven ground, <br> Man watches, thinking hate and love And the brown, aging sears thereof, Like earth, be stilled and virginal, - <br> Like bis own heart, indeed, where all is stilled, and newiy virginal, |  |  |
|  | Aspects, Holidays, Heights of High Water, Weather, etc. | Farmer's Cale |
| 1'Th |  |  |
| 2 Fr. | d. 1856 Apo. $\{8.1$ Blustery Atomic Age born 1942 | very rim of the icy cup of |
| 3 Sa . | "On LInden when the sun was 10 " 1800 Tides $\left\{\begin{array}{ll}9.3 & \text { and } \\ 8.2\end{array}\right]$ | (eiven a clairvoyance with |
| ${ }_{4}^{4} \mathrm{C}$ | 20 D.in Ad. Tldes \{9.5 | understand the troubles and |
| 5 M. |  | lonerings and beauty of this |
| Tu |  | the good green summer over, of the long grey winter ahead, |
| W |  | our minds are sharp with |
| Tb |  | contrasts. In the bite of twi- |
| Fr. | $\left.\begin{array}{l}\text { Frrat Lady Actor } \\ \text { app } 1660 \text { (8th }) \\ \text { Hides }\left\{\begin{array}{l}3.3 \\ 9.8\end{array}\right\}\end{array}\right\}$ |  |
| 10 S |  | lowking to our own comfort and security-the filled wood- |
| ${ }_{11} \mathrm{C}$ |  | shed, the well-banked house, the armory of food in the |
| 12 M. |  | cellar-in looking to these, there comes a truer sense of |
| 13 Tu . | St. Licy, of occ $\mathbb{C}_{\text {Eq. }}^{\text {D. }}$. Tides $\{9.9$ | there comes a truer sense of the other fellow's lacks and |
| 14 W. |  | hunkers. Clear as Monadnock arainst the December sky we |
| 15 Th. |  | have the meaning of our own lives in thls strange and |
| 16 Fr. | Thleyon Tides $\boldsymbol{y}_{9.6}^{10.6}$ | lovely world-a world of want |
| 17 S |  | and plenty, peace and war- all that is worst in mankind |
| 18 C |  | and all that is test No life |
| 19 Ml . |  | others and reaches out to as |
| 20 Tu . |  | much of iumanity as it may chcer and help. |
| 21 W. |  | cher in the country here we like |
| 22 Th. |  | to think that this "December wlsdom springs partly fro |
| 23 Fr . |  | the fact that we can look, |
| 24 Sa . |  |  |
| 25 C |  | der of the mountain. liut in |
| 26 M . |  | wisdom as we or any man |
| 27 Tu |  | found in the windows or on |
| 28 W. |  | doorstens, at street corncrs |
| 29 Tb . |  | everywhere. Itt is a wisdom |
| 30 Fr . |  | that springs from the heart alone. It is the lheart that |
| $31, \mathrm{Sa}$. |  | must see. |

## NEW ENGLAND'S GREATEST FIRES

The Holocausts of October 1947
The New England summer had come to an end with a record of less than fifty per cent of normal precipitation for the months of Augnst and September. And now the real drought was to begin. The parched earth shriveled and turned to dnst, the dry woodland becane potentially a tinder box. Week followed week withont rain, temperatures soared into the high 80 's and the humidity was as low as 17 per cent. If New England had rccorded longer droughts, never had she known one that flashed danger red in so many ways. (For the first 28 days in October the average rainfall for the six state region was only 0.15 of an incli, while in Boston from september 23 throngh October 28 only 0.06 occurred.) As dry September tarned the corner into drier October, anytling condd start a fire-and did-the spark from a passing train, a carelessly dropped match or cigarette bntt, the logger's saw against hardwood, the picnicker's empty bottle refracting the sun's rays, the purposeful torch of the firebug. With increasing regularity the fires sprang np. And no fire could really be put out-not till the rains came. And then as the hot dry winds began to blow and the lumidity became less and less suddenly and with alnost devilish spontaneity the old fires fanned to lite and new ones by the scores mysteriously appeared. The errant winds swept them back and forth roaring and crackling, traveling faster than a horse could rnn. Down the full length of the Maine coastline to the Cape the world was shrouded in smoke. In the throb and glow of the fires at night there was a primitive terror that New England has seldom known. There seemed no defense against this tidal wave of fire.

There wasu't the know-how to fight this sort of thing, nor the organization, nor adequate water nor weapons to fight with, and the unpredictable fires moved in every direction with incredible speed. The fighters never had a chance to get on balance. The days from the middle of October through the first week in November were abont as close to panic as New England could come.
The red climax of flame came on October 23 with the burning of fashionable Bar Harbor on Maine's Mt. Desert Island. In a few liours $\$ 10,000,000$ worth of palatial homes and the Jackson Memorial Laboratory, with its irreplaceable records of 90,000 precious mice. which had been carefnlly inbred for generations to produce various manifestations of cancer, had been destroyed. Headlines screamed the story-"Fire Traps 3500 at Bar Harbor-1500 Hnddle on Field2000 Nore On Beach." The story of the evacuation from the beach read like a second Dankirk-but unlike Dunkirk, the story was untrne. Bar Harbor itself did not burn. Nobody got off in a boat. But the scarehead story did as mnch harm as the fire!

Reports of other disastrons fires came in on every hand. Seven hnndred evacuated Wells, Maine, as flames devoured the village. The entire city of Biddeford was threatened. Yet, curionsly. here and there between the rains stood unscorched shade trees and clusters of firs and pines.

Maine's Governor Horace A. Hildreth called on Maine's citizens everywhere to organize on a wartime footing against "the greatest conomic catastrophe in the state's listory.

As fiaming October gave way to cool November. the worst of the danger had past. New England counted the cost-ciose to a $\$=0,000,000$ loss, more than a thousand homes burned, 2500 made homeless, 13 killed, npwards of 100,000 acres of woodlands destroyed.

## 1949 GOOD HOLIDAY WEEKEND YEAR

In 1949, there will he two "Saturday holidays"-New Year's and Lincoln's:- five "Monday or Friday holidays"-Good Friday (April 15). Memorial Day (Mon., May 30), July 4 (Mon.), Sept. 5 (Labor Hay Mon.), and Armistice Day (Nor. 11, Fri.) This gives a total of at least seven planned week-end trips. Those in a position to stretch their week-ends might also look into Inaugural Day (Thursday. Jan. 20), Washington's (Tuesday, Feb. 22), Patriots' (Tuesdar, Apr, 19), and Thanksyiving on Thursday, November 24 h. Christmas Day in 1049 falls on a Snnday-supposed to mean way back in the 15th contury, that the winter will be "troublous-and mingled with waters strong."

## MOTOR VEHICLE LAWS - APRIL 1, 1948

Source: American Automobile Association

| State | $\begin{gathered} \text { Speed } \\ \text { limit } \\ \text { (R-rea- } \\ \text { sonable) } \\ \hline \end{gathered}$ | Date new license plates can be used | Driving license* Minimum are | Gasoline tax | Percent sales tsx | Period of stay ${ }^{1}$ | Safety responsibility law | Certificate of title required |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Alabama. | R | Oct. | 16 | \$. 06 | $1 / 2^{2}$ | Reciprocal | yes | no |
| Arizona. | 60 | Dec. 15 | 18 | . 05 |  | ${ }^{3}$ | yes | yes |
| Arkansas | 55 | Jan. 1 | 18 | . 065 | 2 | 90 days | no | no |
| California | 55 | Jan. 1 | 16 | . 045 | $21 / 2$ | ${ }^{3}$ | yes | yes |
| Colorado. | 60 | Onissue | 16 | . 06 | 2 | Reciprocal | yes | yes |
| Connecticut | 40 | Feb. 15 | 16 | . 04 | 3 | Reciprocal | yes | no |
| Delaware. | 50 | 4 | 16 | . 04 |  | Reciprocal | yes | yes |
| D. C. | 25 | Mar. 1 | 18 | . 04 |  | Reciprocal | yes | yes |
| Florida. | 60 | Dec. 1 | 16 | . 07 |  | Reciprocal | yes | yes |
| Georgia. | 55 | Jan. 1 | 16 | . 06 |  | 30 days | yes | no |
| Idaho. . | 35 | Jan. 1 | 16 | . 06 |  | Reciprocal | yes | yes |
| Illinois. | R | On issue | 15 | . 03 | 2 | Reciprocal | yes | yes |
| Indiana. | R | Jan. 2 | 16 | . 04 |  | 60 days | yes | yes |
| Iowa. | R | Dec. 1 | 16 | . 04 | 2 | Reciprocal | yes | no |
| Kansas. | R | Jan. 1 | 16 | . 04 | 2 | Reciprocal | yes | yes |
| Kentucky. | 45 | Dec. 29 | 18 | . 05 | $3^{5}$ | Reciprocal | yes | 6 |
| Louisiana. | R | Dec. 1 | 15 | . 07 | 1 | Reciprocal | no | no |
| Maine. | 45 | Dec. 25 | 15 | . 06 | ${ }^{7}$ | Reciprocal | yes | no |
| Maryland | 50 | Mar. 15 | 16 | . 05 | 2 | Reciprocal | yes | yes |
| Massachusetts | 40 | Jan. 1 | 16 | . 03 | ${ }^{7}$ | Reciprocal | 9 | no |
| Michigan. | R | On issue | 16 | . 03 | 3 | 90 days | yes | yes |
| Minnesota. | 60 | Dec. 1 | 15 | . 04 |  | Reciprocal | yes | no |
| Mississippi | 55 | Nov. 1 | 17 | . 06 | 1 | - ${ }^{3}$ | no | no |
| Missouri. . | R | Dec. 31 | 16 | . 02 | 2 | Reciprocal | yes | yes |
| Montana. | 50 | Jan. 1 | 15 | . 05 |  | 30 days | yes | yes |
| Nebraska. | 60 | Jan. 1 | 16 | . 05 | $\ldots$ | ${ }^{3}$. | yes | yes |
| Nevada. | R | Dec. 15 | 16 | . 04 | $\ldots$ | No limit | no | yes |
| New Hampshire | 35 | Mar. 1 | 16 | . 04 | $\ldots$ | Reciprocal | yes | no |
| New Jersey. . | 40 | Mar. 1 | 17 | . 03 |  | Reciprocal | . yes |  |
| New Mexico | R | Onissue | 14 | . 05 | 1 | 90 days | yes | yes |
| New York. | 50 | Jan. 1 | 18 | . 04 |  | Reciprocal | yes | no |
| North Carolina | 55 | Dec. 1 | 16 | . 06 | 311 | Reciprocal | yes | yes |
| North Dakota.. | 50 | Jan. 1 | 16 | . 04 | $\stackrel{2}{3}$ | Reciprocal | yes | yes |
| Ohio.. | 50 | Mar. 1 | 16 | . 04 | 31 | Reciprocal | yes | yes |
| Oklahoma | R | Dec. 21 | 16 | . 055 | 2 | 60 days | no | yes |
| Oregon | 55 | Dec. 15 | 16 | . 05 |  | Reciprocal | yes | yes |
| Pennsylvania | 50 | Mar. 15 | 18 | . 04 |  | Reciprocal | yes | yes |
| Rhode Island | 35 | Mar. 1 | 16 | . 04 |  | Reciprocal | yes | no |
| South Carolina. | 55 | Sept. 1 | 14 | . 06 |  | 90 days | nо | no |
| South Dakota . | 60 | Jan. 1 | 15 | . 04 | $2^{12}$ | 90 days | yes | yes |
| Tennessee. | 50 | Mar. 1 | 16 | . 07 | ${ }^{2}$ | 30 days | yes |  |
| Texas... | 60 | Feb. 1 | 16 | . 04 | 1 | Reciprocal | no | yes |
| Utah. | 60 | Dec. 15 | 16 | . 04 | 2 | 60 days | yes | yes |
| Vermont | 50 | Mar. 1 | 18 | . 045 |  | Reciprocal | yes | no |
| Virginia. | 50 | Mar. 15 | 16 | . 06 |  | 6 mos. | yes | yes |
| Washington.. . | 50 | Nov. 15 | 16 | . 05 | 3 | Reciprocal | yes | yes |
| West Virginia. . | 50 | June 20 | 16 | . 05 | $2^{13}$ | 90 days | yes | yes |
| Wisconsin. . . | R | Onissue | 16 | . 04 |  | Reciprocal | yes | yes |
| W yorning. . . . . | 60 | Dec. 1 | 15 | . 04 | 2 | 90 days | yes | yes |

[^0]
## DEATH WARRANT OF JESUS CHRIST

The most imposing judieial document, to all Christians, that has ever been recorded in human annals, is the death warrant of our Lord Jesus Christ. We transeribe a copy of the translation: Sentence: Rendered by Pontius Pilate, acting Governor of Lower Galilee, that Jesus of Nazareth shall suffer death on the Cross:
In the year seventeen of the Empire of Tiberius Caesar, and the 25 th day of March, in the eity of Holy Jerusalem; Annas and Caiaphas being Priests, sacrificators of the people, of God; Pontius Pilate Governor of Lower Galilee sittiug on the Presidential Chair of the Praetory, condemns Jesus of Nazareth to die on the cross between two thieves-the great and uotorious evidence of the people, saying-

1. He is a seducer.
2. He is seditious.
3. He is an enemy of the law.
4. He ealls himself, falsely, the Son of God.
5. He calls himself King of Israel.
6. He entered into the Temple followed by a multitude bearing palm branches, in their hands.

Order the first centurian, Quintus Cornelius, to lead him to the place of execution.

Forbid any person whomsoever, either poor or rich, to oppose the death of Jesus.

The witnesses that signed the death of Jesus are -
1st. Daniel Robani; a Pharlsee.
2d. Joannus Horabable.
3d. Rhaphdel Rebadi.
4th. Capet, a citłzen.
Jesus shall go out of the city by the gate "Strenusus."
The above sentences are engraved on a copper plate: on one side, is written these words: "A similar plate is sent to each of the tribes."

It was found in an antique vase of white marble, while excavating in the city of Aequilla, in the kingdom of Naples, in the year 1825. and was discovered by the Commissariat of arts, attached to the French armies. At the expeditiou of Naples it was found enclosed in a box of ebony, in the saeristy of Gurtem. The vase was, about 1850 in the Chapel of Caserta. The French translation was made by the members of the Commission of Arts.

## THE FROZEN DEAD AT THE HOSPICE OF ST. BERNARD

The scene of greatest interest at the Hospice, is that of the building where the dead bodies of lost travellers are deposited. There they are, some of them as wheu the breath of life departed, and the death angel, with his instruments of frost and snow, stiffened and embalmed them for ages. The floor is thick with nameless skulls, and bones, and human dust, heaped in confusion. But around the wall are groups of poor sufferers iu the very position iu which they were found, as rigid as marble, and in this air, by the preserving element of au eternal frost, almost as uncrumbling. There is a mother and her child, a most affecting inage of suffering and love. The face of the little one remains pressed to the mother's bosom, only the back part of the skull being visible. the body enfolded in her careful arms. The snow fell fast and thick; and the hurricane wound them botl up in one white shroud, and buried them. There is also a tall, strong man, standing alone, the face, dried and black but the white, unbroken teeth, firmly set and closed. grinning from the fleshless jaws-it is a most awful spectacle. There are other groups more indistinct; but these two are never to be forgotten, and the whole of these dried and frozen remnants of humanity are a terrifie demonstrathon of the tearfuncss of the mountain pass, when the elements, let loose in fury, encounter the unhappy traveller. You look at all this througl the grated window; there is just light enough to make it solemuly aud distinctly visible, and to read in tt a powerful record of mental and physical agony and of maternal love in death. That little child, hiding its face in its mother's bosom, and both frozen to death-one can never forget the group, nor the memento mori, nor the token of deathless love. Dr. Cheever's Wanderings of a Pilgrim, in the Shadow of Mont Blanc, 1850.

No device of art, lowever, for the preservation of the remains of the deal, appears equal to the simple process of plunging them over head and ears in peat moss.

## GESTATION AND REPRODUCTION TABLE

|  | Proper age for first mating | Period of power of reproduction in years | No. of females for one male | Period of gestation and incubation |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Shortest days | Mean days | Longest days |
| Mare. | 3 yrs | 10 to 12 |  | 325 | 336 | 352 |
| Stallion. | $4{ }^{4}$ | 12 to 15 | 20 to 30 |  |  |  |
| Cow. | 18-24 mos. | 10 to 14 |  | 235 | 282 | 300 |
| Bull. | 12-18 18 ". | 10 to 12 | 30 to 40 | 145 | 147 | \| 152 |
| Ram. | 12-14 " | 7 | 35 to 45 |  |  |  |
| Sow. | 9 " | 6 |  | 110 | 114 | 120 |
| Boar. | 9 " | 6 | 8 to 12 |  |  |  |
| She Goat | 18 " | 6 |  | 147 | 151 | 155 |
| He Goat. | 18 " | 5 | 20 to 30 |  |  |  |
| A8s. | 3 yTs. | 10 to 12 |  | 356 | 367 | 378 |
| She Buffalo | ${ }_{18-24}^{4} \mathrm{mos}$. | 12 to 15 | 20 to 30 | 309 | 315 | 325 |
| Bitch..... | 16-18 | 8 |  | 58 | 63 | 67 |
| Dog. | 12-16 ${ }^{\prime}$ | 8 |  |  |  |  |
| She Cat. | 12 mos . | 6 |  | 58 | 60 | - 64 |
| He Cat. | 12 " | 10 | 6 to 8 |  |  |  |
| Doe Rablit | 6 "' | 5 to 6 |  | 25 | 30 | 35 |
| Buck Rabbit | 6 "، | 5 to 6 | 30 |  |  |  |
| Cock. |  | 5 to 6 | 12 to 18 |  |  |  |
| Hen. |  | 5 to 6 |  | 19 | 21 | 24 |
| Turkey |  |  |  | 24 | 26 | 30 |
| Duck. |  |  |  | 28 | 30 | 32 |
| Goose. |  |  |  | 27 | 30 | 33 |
| Pigeon. . . . . |  | - |  | 16 25 | 18 | 20 |
| Pea Hen. ${ }_{\text {Guinea }}$ |  | - |  | 25 20 | 28 | 30 25 |
| Swan.... |  |  |  | 40 | 42 | 45 |
| Hen or Duck's Eggs. . . . . . . . |  |  |  | 22 | 30 | 34 |

## DURATION AND FREQUENCY HEAT SEASON



## DIGEST OF LATEST AVAILABLE FISH AND GAME LAWS

Open seasons include both dates, "Rabbit" includes "hare'; "quall" includes "partridge" in South; "grouse" includes Canada grouse, sharptailed, ruffed (known as partridge in North and pheasant in South) and other members of family except prairie chickens ptarmigan and sage hen, As many states do not complete laws for 1949 until after our press date, VERIFY in every case for changes even though the changes from year to year are not as a rule sensational. Limits are dally except those in itallics which are seasonal.

Migratory Bird Laws for 1949 will not be released until August, For details consult local authorities or write Department of Interior, Fish \& Wildlife Service, Chicago 54, Illinois,
$\delta^{7}$ males only. $\dagger$ loeal exceptions. $\ddagger$ non-resident exceptions. \# Pounds.


| Idaho (cont. |  | $\left.\begin{gathered} 20 \\ \text { or } \\ 15{ }^{2} \end{gathered} \right\rvert\,$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Hun. partridge | Local seasons |  | Striped bass | June 1-Apr. 30 | 15 |
| Sage hen | Local seasons |  | Crapple | June 1-Apr. 30 | 15 |
| Pheasaut | Local seasons |  | Rock bass | June 1-Apr. 30 | 15 |
| Trout | June 4-Oct. 31 |  | Musk flunge | June 1-Apr. 30 |  |
|  |  |  | Loulsiana Deer | Nov, 1-Jan. $10 \dagger$ | 2 |
| Bass (1-mouth) | No closed season | 10 | Bea | Nov. 1-Jan. 1 | 5 |
|  |  |  | Raulr | Oct. 1-\$an. 15 | 120 |
|  |  |  | Qquali | Oct. 1-dan. 15 | 120 |
|  |  |  | Turkey | Apr. 1-Apr. $150^{\circ}$ | 1 |
| Bass (s-mouth) <br> Salmon (steelhd.) | Local seasons | 2 | Bass, black, | No closed season | 15 |
|  |  |  | yel, white | No closed reason | 25 |
| Illinols | 11-Jon 31 | 45 | Crappie <br> Suntish | No closed season | 25 <br> 50 |
| Rabbit | July 15-Nov. $15 \dagger$ Nov. 11-Dec. 11 Nov. 11-Nov. $25 \dagger$May 15-Mar. $31 \dagger$ |  | Maine |  | 1 |
| Squirrel |  | 1536 |  | Oct. 21-Nov. 30 |  |
| Quali |  |  | Deer |  |  |
| Pheasant |  | 6 | Bear | No closed season |  |
| Bass, black |  | 10 | Rabb | Oct. 1-Feb. $28 \dagger$ |  |
| Bass (rk., wrmith. | No closed season |  | Pheasant | Oct. 1-Nov. 15 | 12 |
| wh., yel.) crappies. |  | $\left\lvert\, \begin{gathered} \left(\begin{array}{rl} (75 \\ \ln \\ \operatorname{ag} \\ \mathrm{g} . \end{array}\right) \\ \hline \end{gathered}\right.$ | Grouse | Oct. 1-Nov. 15 |  |
| crapples. <br> sunf., blue- |  |  | Salmon, togue (a) | Ice out-Sept. 30 | 5 |
| gills ${ }^{\text {gre }}$ |  |  | Salmon, togue(b) | Ice out-Sept. 15 | 25 |
| Buffalo, bullhd., catl., carp. sbohd |  | 8 | Srout (a) ${ }^{\text {S }}$ ( ${ }^{\text {a }}$ | lce out-Aug. 15 lce out-Sept. 30 | 25 |
|  | No closed seaso |  | Trout | lce out-Sept. 30 | 25 |
|  |  |  | Trout (c) | lce out-Aug. 15 | 25 |
| Perch |  |  | Wh. perch(a) | lce out-Sept. 30 | 25 |
| Plckerel | $\begin{aligned} & \text { No closed seaso } \\ & \text { ใMay } 1-\text { Feb. } 28 \end{aligned}$ | $\begin{array}{r}10 \\ 10 \\ \mathrm{ag} \\ \mathrm{g} . \\ \hline\end{array}$ | Wh. perch(b) | lce out-Sept. 15 | 25 |
| Wall-eyed plke |  |  | Wh. perch (c) Black bass (a) | lce out-Aug. ${ }^{\text {June } 21-S e p t . ~} 30$ | 25 |
|  |  |  | Black bass (b) | June 21 -Sept. 15 | 25 |
| Lake t |  |  | Black bass (c) | June 21-Aug. 15 | 25 |
| Lake | No closed season |  | Black bass (fy) | June 1-20 | 3 |
| Indiana | Nov. 10-Jan 10 |  | a-Lakes \& ponds b-Riv. abv. tldewtr. c-Brooks, streams |  |  |
|  |  |  |  |  |  |
| Rabbit |  |  |  |  |  |
| Squirrel | Dates not set |  |  |  |  |
| Pheasant | Dates not set |  | Maryland Deer |  |  |
| Hun. nartridge | Nov. 10-Dec. 20 |  |  | Dec. 1-6 | 1 |
| Bluesill, rd. eared sunf. crapple, rock bass | June 16-Apr. 30 | 25 | Rabblt | Nov. 15 -Dec. $31 \dagger$ |  |
|  |  | 1n ${ }_{\text {ag- }}$ | Squirrel | $\left\{\begin{array}{l}\text { Sept. 15-Sept. } 30 \\ \text { Nov. 15-Dec. } 31 \dagger\end{array}\right.$ |  |
|  |  | g. | Quail | Nov. 15-Dec. 31 |  |
| Bass, sliv. or yel., b1., ky., wh. or str. | June 16-Apr. 30 | $\begin{gathered} \text { in } \\ \mathrm{ag}- \\ \mathrm{g} \end{gathered}$ | Grouse | Nov. 15-Dec. $31+$ | 6 |
|  |  |  | Phessant | Nov. 15-Dec. $31+{ }^{\circ}$ | 1 |
|  |  |  | Turkey | Nov. 15-Dec. $31 \dagger$ | 1 |
|  |  |  | Trout | Apr. 15-July 15 | 10 |
| Pike-perch | June 16-Apr. 30 | $\begin{aligned} & \mathrm{g}_{6} \\ & \hline \end{aligned}$ | l3ass-non-tdl.Str. (rck.) bass, | June 1-Nov. 30 | 10 |
| Pike or plekerel | June 16-Apr. 30 | 6 |  | June 1-Nov. 30 |  |
| Yellow perch Trout | June 16-Apr. 30 May 1-Aug. 31 | 15 | wan-tdi. wtrs. | June 1-Nov. $30 \dagger$ | 10 |
| Chan. cattish | No closed season |  | Plke, plekerel | July $1-\mathrm{Nov} .30$ | 10 |
| Iowa |  |  | Perch | Feb. 15-Nov. 30 |  |
|  | Aug. 1-Mar. 1Sept. $15-$ Nov. 15 Oct. 28-Oct. $30 \dagger$ a Nov. 1-Nov. 30 | 10 | Ca | Feb. 15-Nov. $30+$ |  |
| Rabblt |  |  | Massachusetts |  |  |
| Squirrel |  |  | Deer ${ }_{\text {Labblt, }}$ | Dec. 2-Dec. $7 \dagger$ |  |
| Quasan |  |  |  | Oct. 20-Feb. $15 \dagger$ | 5-3 |
| Hungarlan | Nov. 1-Nov. ${ }^{\text {N }}$ |  | squirre Quall | Oct. $20-\mathrm{Nov} .20$ | 150 |
| partridge | Nov. $12-$ Nov. $14 \dagger$Mav 1-Sept. 30 |  |  | Dates not set | 15 |
| Trout |  | 8 | Grouse | Oct. 20 -Nov, $20{ }^{7}$ | 6 |
| Northern pike | May $15-\mathrm{Nov} .30 \dagger$ June 15 -Nov. $30 t$ | 5 | Pheasant | Oct. 10-Jan. 1 |  |
| Bass |  |  | OpossumBass | Oct. 10-Jan. 1 | 2 |
| saug. W,-ey | May 15-N゙ov. $30+$ No closed season | 25 |  | July 1-Feb. 15 | 5 |
| Bullheads |  |  | Plke | Apr. ${ }^{\text {Apreb }}$ 15-Feb. 15 | 5 |
| Yell, pch. and |  |  | Pickerel | Apr. 15 -Feb. 15 | 10 |
| bass, vello |  |  | Pikc perch | A pr. 15-Fcb. 15 | 5 |
| Str., 8llver |  | 15 | Salmon | Apr. 15-Feb. 15 | 5 |
| Crap., cal. ba | A pr. 15-Nov. $30 \dagger$ | 15 | Trout | Apr. 15-July 31 $\dagger$ | 12 |
| Kansas Squirrel 4uail Pheasant Bass | June 15-Nov. 30 Intermittent Oct. 30 -Nov. 3 May $25-$ A pr. 24 | $\begin{array}{r} 10 \\ 3 \\ 10 \end{array}$ | Bluegls., cal. |  |  |
|  |  |  | hrn |  |  |
|  |  |  | peh. | Apr. 15-Feb. 15 | 0 |
|  |  |  | per. |  |  |
|  |  |  | Michigan <br> Deer <br> Deer (bow \& arrow) <br> Bear <br> Rabblt <br> Squirrel <br> Grouse, prairle <br> chlcken <br> Pheasant |  |  |  |
| Kentucky | Nov. 20-Jan. 15 <br> Nov. 20-Jan. 15 <br> Dec. 1-Dec. 15 <br> June 1-Apr. 30 <br> May $30-\mathrm{Apr} 30$ |  |  |  | Oct. 1-Nov. 5 | 1 |
| Rabbit |  |  |  |  |  |
| ${ }^{\text {Squirre }}$ |  |  |  |  | Nov.15-Nov. $30 \dagger$ | 1 |
| Ruffed Grouse |  |  |  |  | \{U-Oct. 1-Mar. ${ }^{\text {d }}$ | 50 |
| Bass, black |  |  |  |  | L-Oct. 15-Nov. $5 \dagger$ | 25 |
| Trout |  |  |  |  | U-Oct. 1-Oct. $20 \dagger$ | 25 |
| W -eyed plze, sand plke or |  |  |  |  | U-Oct. 15-Nov. $5 \dagger$ | 25 |
| sand plee or saucer | June 1-Apr. 30 |  |  |  | L-Oct. $15-$ Nov. $5 \dagger$ | 8 |



| NorthCarolina. <br> Deer <br> Bear <br> Rabblt <br> Squirrel <br> Quall <br> Grouse <br> Turkey | Dates not set Write J. D. Findlay Raletgb, N. C |  | Penn, (cont.) <br> Y'cll. pch., rock bass, str. or cal. bass, wh.; crapple, sunt., catf., suckers, carp | No closed season | 15 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Russian boar |  |  | Rhode Island |  |  |
| Trout | A | 10 | Rabbit | Nov. 1-Dec. $31 \dagger$ |  |
| Pike, walleyed | No closed season | 8 | lare | Nov. 1-Deo. 31 |  |
| Bass, striped | No closed season | $\stackrel{5}{8}$ | Quail | Nov. 1-Dec. 31 |  |
| North Dakota |  |  | Grouse | Nov. 1-Dec. $31 \dagger$ |  |
| eer | Nov. 26-30 ${ }^{\text {ot }}$ |  | Pheasan | Nov. 1-Dec $31{ }^{\text {or }}$ |  |
| Sharptall | Sept. 30-Oct. $20 \dagger$ | 6 | Bass | June ${ }^{\text {June }} 20-\mathrm{Feb} .20{ }^{\text {a }}$ | 0 |
| Pln'd grouse |  |  | Plicker | June 20-Feb. $20 \dagger$ | 10 |
| Sage \& ruffed grouse; part'ge | Dates not set |  | Strout | A o closed season |  |
| Pheasant ${ }^{\text {b }}$ | Sept. 30-Dec. $31 \dagger$ | 2 | Percb, wbite | No closed season | 20 |
| Bass | June 16-Oct. 31 | 5 | Percb, yellow | No closed season | 30 |
| nortbern plke | May 16-Oct. 31 | 10 | South Carolin |  |  |
| Crapple | June 16-Oct. 31 | 15 | Deer | Aug. 15-Jan. $1 \dagger{ }^{\text {a }}$ | 5 |
| Sunflsh | June 16-Oct. 31 | 15 | Rabbit | Sept. 1-Mar. 1 |  |
| Perch | May 16-Oct. 31 | 25 | Squirre | Sept. 1-Mar. 1 |  |
| Ohio |  |  | Turkey | Nov. 26-Mar. ${ }^{\text {Nor }}$ | 20 |
| Deer | Dates not set |  | Trout, speckled | Jan. 1-Sept. 1 | 20 |
| Rabblt | Nov. 1-Jan. 1 | 4 | Trout, ralnbow | Jan. 1-Sept. 1 | 20 |
| Squirrel | Sept. 14-28 | 4 | Bass | No closed seasont $\dagger$ | $10 \dagger$ |
| Hun. partrldge | Nov. 15-30 ${ }^{\text {a }}$ | 2 | South Dako |  |  |
| Grouse DIST | Nov. 15-30 ${ }^{\text {a }}$ | 2 | Deer | Nov. 1-20 ort | 1 |
| INLAND DIST. | No | 2 | Grouse, prairle |  |  |
| Wall-eyed plke | No closed season | 6 | Pheasant | Oct. 15-Dec. $13 \dagger$ |  |
| Sauger | No closed season | 6 | Hun. partridge |  |  |
| Trout | Apr. 15-Sept. 16 | 6 | Trout | May 1-Feb. 28 | 15 |
| Bass ERIE DI | June 16-Apr. 30 | 6 | Bass, w.e- |  |  |
| LAKE ERIE DI | ST. <br> No closed season |  | pike, pickerel | June 15-Feb. 28 | 8 |
| Wall-eyed plke | No closed season |  | Bullheads, pch. | May 1-Feb. 28 | 50 |
| Sauger | No closed season |  | Crapples, sunf. | May 1-Feb. 28 | 15 |
| Trout | Apr. 15-Sept. 16 | 6 |  |  |  |
| Bass |  |  | Tennessee |  |  |
| Squirre | May 15-Dec. 31 | 10 | Deer | Nov. 1-20 ${ }^{\text {d }}$ | $1 \dagger$ |
| Quail | Inter. (Nov.-Jan.) | 10 | Bear | Speclal seasons Nov. $25-\mathrm{Jan} .25$ |  |
| Bass | No closed seasont | 10 | Squirrel | Nov. 25-Jan. 3 it |  |
| Chan. catish | No closed season $\dagger$ No closed seasont | 15 | Quail | Nov. 25-Jan. 25 |  |
| Crapple | No closed seasont | 15 | Grouse | Nov. 25-Jan. 25 |  |
| Orego |  |  | Wlid boar | Speclal seasons | $1{ }^{+}$ |
| Deer | Sept. 28-Oct. $20{ }^{\text {ot }}$ | 1 | Trout | Apr. 1-กct. ${ }^{\text {May }} \mathbf{}$ | 8 |
| Elk | Sept. 22-30 | 1 | Wall-eyed pike | May 30-Mar. 31 | 5 |
| Antelope | Sept. 28-Oct. $20 \dagger$ | 1 | Sauger plike | May 30-Mar. 31 | 10 |
| Squirr | Oct. $1927 \dagger$ ¢ |  | Muskellunge | May 30-Mar. 31 | 5 |
| Blue grouse | Oct. 12-20 |  | Crapple | May 30-Mar. 31 | 15 |
| Pheasant | Oct. 19-27† |  | Whock bass | May 30-Mar. 31 | 15. |
| Hun. partridge | Dates not se |  | White, str. bass <br> Yellow bass or | May 30-Mar. 31 | 15. |
| Trout, salmon, | A | 15 | Y jacks | May 30-Mar. 31 |  |
| less than $20^{\prime \prime}$ |  |  | Warmouth hass | No ciosed season | 25 |
| Bass, black; |  |  | Bluegili bream Catflish | No closed season No ciosed season |  |
| Percb, crapp | No closed season | 30 | Bufalo | No closed season |  |
| bream, plke |  |  | Texas |  |  |
| Str. bass, Shad | No closed season <br> No closed season |  | Deer | Nov. 16-Dec. $31 \dagger{ }^{\circ}$ |  |
| Pennsylvania |  |  | Bear | Nov. $16-$ Dec. 31 Oct. $1-$ Dec. $31 \dagger$ | 1 |
| Deer, female | No open season |  |  | (Oct. 1-Dec. $31 \dagger$ |  |
| Deer, 2 pt. ant. | Dec. 1-12 | 1 | Squirrel | Q May 1-July $31 \dagger$ |  |
| Deer, no ant. | Dec. 13 |  | Quali | Dec. 1-Jan. $16 t$ |  |
| Bear | Nov. 17-22 |  | Turkey | Nov. 16-Dcc.31t ${ }^{\text {N }}$ | 5 |
| Rabbit, Cttl. | Nov. $\mathrm{Nov.30}$ | 24 | Whass, bl., sp ted | No closed scason | 25 |
| Quail, Bbwht. | Nov. 1-30 | 12 | Trout | No closed scason | 5 |
| Grouse, Rid. | Nov. 1-7 |  | Crapple | No closed ceason | 25 |
| Pbeas'nt,rgnk,m. | Nov. 1-30 | 8 | Catasb | No closed season | 25 |
| Turkey | Nov. 1-30 $\dagger$ | 8 |  |  |  |
| Partridge, Hun. | Dec. 22-Jan. 1 | 8 | Deer | Oct. 18-Oct. $28 \dagger \sigma^{7}$ | 1 |
| $\begin{aligned} & \text { Hare, } \\ & \text { Trout } \end{aligned}$ | Apr. $15-J$ Jujy $31 \dagger$ | 10 | Elk (By permit) | Oct. 18-Oct. $28+$ | 1 |
| Trout, 1k. or sal. | Juiy 1-Scpt. 29 | 8 | Grouse, sare hen, |  |  |
| Bass | Juiy 1-Nov. 30 | 6 | prairie cbicken | No open season |  |
| Plke-perch | Juiy 1-Nov. 30 | 6 | Pheasant | Nov. 2-Nov. 5 | 3才 |
| Pickerel | July 1-Nov. 30 | 6 | Bass |  |  |
| M uskellunge, West'n and |  |  | Bass | June 15-Oct. 31 ${ }^{\text {M }}$ | 20 |
| North'n pike | July 1-Nov. 30 | 2 | Salmon | June 15-Oct. $31 \dagger$ | 20 |



## MIGRATORY BIRD LAWS

In 1946 the duck season was drastically reduced from so to 45 days -then cut again in 1947 to 30 days. l3y now the conservation officials have the science down to such a state that you need a ouija board in addition to the rules to understand the seasons. However here are a few shots at it just to give you an idea. In the Dcep South the season ran from Dec. 8, 1947 to Jan. 6, 1948 ; Conn. and Mass.Nov. 18 to Dec. 17; R.I.-Dcc. 2-31; Vt.-Oct. 21-Nov. 19; Me. and N. H.-two scasons-Oct. 7-18 and Dec. 2-31. We suppose the idea was that a checkerboard could be laid out over the country and the ducks just jumped over the (open scason) red squares. It's all yours anyway.

Scoters (Sca coots to you) could be taken in New England and New York (excent for Mainc) during duck season. In Maine, it was Oct. 16 to Dec. 16tlı. In two counties of llliuois, Oct. 1-12. In open coastal waters-it's all differcnt.

Rails and Gallimules found safe harbor in states like Calif., D.C., (so that's why certain of the people's representatives remain un-shotat?) Ind.. Mont., Nev.. Ore.. Tenu. and Washington. But you conld shoot 'em in Ala. (Nov. 20-Jan. 31), Ill. (Oct. 1-12), Mainc (Oct. 7-18 and Dec. 2 to 13), Md. (Sept. 1-30), Mimn. (Sept. 16-Nov. 30) and certain other states at certaiu other times.

Bag limits on ducks are down to four-except for American and Red Breasted Mergansers on which you get 25. Sea Coots, 7. Canada


ATTENTION, PLEASE: Don't go hunting migratory birds until you have thoroughly familiarised yourself with the new laws published in September, 1948 by Fish \& Wildlife Service, Dept. of the Interior, Chicago 54, Illinois.

## The only horse that



## Absorbine now and then-

- Absorbine is especially helpful in relieving windgall, curb, thoroughpin... puffs, strains and bruises. A stand-by for 50 years... Absorbine is used by many leading veterinarians. Does not blister or remove hair. At all druggists ... only $\$ 2.50$ for a LONG-LASTING BOTTLE.
W. F. Young, Inc., Springfield, Mass.


## ANECDOTES AND PLEASANTRIES

## BRIEF SEASON

On the door of the Old Farmer's Almanac, high up in the hills of Dublin, N. H., where snows lie long into the spring, is posted a cartoon showing an elderly native talking to a visitor. The drifts are piled deep and the stormy winds do blow. Both characters are well-muf-fled-up.
"I understand," the visitor is saying, "that you have a very short summer here."
"Yup", says the old-timer, "sure do. Last year 'twas on a Thursday."

## ASTROLOGICALLY SPEAKING

For a long time astrologers have been interested in flowers. They have originated a special list of flowers for each month and liave also signified their sentiments. There is something of special interest in each of these species, they say, and if man could but begin to know what causes this rich life to come into our every-day path, he would understand many unanswered questions of this world and perhaps even the hereafter. Astrologically speaking, they are
as follows:

January-
February-
March-
April-
Nay-
June-
July-
August-
September
October-
November
December-

Rose
Love
Lilac
Facetiousness
Violet .... Modesty
Carnation
Fascination Miguonette .Cliarm Orange Blossom. Purity Geraninm

Gentility Poppy ... Pleasure Bluebell .... Truth Lavender . Devotion Jasmine ..... Grace Forget-me-not Constancy

## THE TREE-TOAD

"'S curious-like," said the treetoad,
"I've twittered for rain all day; And I got up soon,
And hollered tel noon -
But the sun hit blazed away,
Tel I jest clumb down in a crawfish hole,
Weary at hart, and sick at soul!
"Dozed away fer an hour,
And I tackled the thing agin:
And I sung and sung,
Tel I knowed my lung
Was jest about give iu;
And then, thinks $I$, ef hit don't rain now,
'They's nothin' in singin', anyhow!
"Onc't in a while some farmer Would come a-drivin' past;
And he'd hear my cry,
And stop and sigh-
Tel I just laid back at last.
And I hollered rain tel I thought my th'oat
Would bus wide open at ever' note!
"But I fetched her-0, I fetched her -
'Cause a little while ago,
As I kinda set,
With one eye shet,
And a singin' soft and low.
A voice drapped down on my fevered brain,
A-sayin',-'Ef, you'll jest hush, I'll rain!',

James Whitcomb Riley
from Songs of Summer

## A LA ALGER

Once upon a time a thirteen-year-old boy began to work as a typesetter in a small printing shop in Garnett, Kansas. After two months he wrote a letter to his aunt, including the following:
"Since I have been at this trade, I find that a great many printers chew and smoke and drink. I have been figuring it up-if a fellore spent ten cents a day for whisky, in ten years, counting no interest, he will have spent $\$ 365$. For tobacco, if he spent only twenty cents a week, that would be $\$ 104$ in ten years. All together that would be enough to buy a second-hand press and type. I am now thirteen years old, and I am going to save my money instead of spending it for tobacco and drinks, and by the time I ain twenty-one I will have enough to buy a good secondland press. Your nepliew. Art Capper."

Since that letter was written, United States Senator Arthur Capper has bought many a press, and his teu papers in four states have four million subscribers. IIe also operates two radio stations. and is probably the best agricultural authority in the uatiou. His Capper's Farmer has a subscription list of nearly two million, and he is one of the most raluable reform leaders in the United States.

Arthar Capper uever regretted his boyish decisiou to be a total abstainer from alcoholic drinks and tobacco.

## GHIQUITA BANANA says:



## Have you ever...

 BROILED A BANANA?BAKED A BANANA?

## FRIED A BANANA?

Until you have, you are missing one of the most delightful surprises you can bring to your table.

So - please read the five different, delicious recipes on the next three pages, and send for . . .
two FREE colorful cook booklets . . . telling you how to bake, broil and fry bananas . . . how to serve bananas new delicious ways in salads, breads, pies and cakes.



## Use all-yellow bananas

For deep-fat frying, have deep kettle $1 / 2$ to $2 / 3$ full of melted fat or oil.

Heat fat to $375^{\circ} \mathrm{F}$., or until a 1 inch cube of bread will brown in about 40 seconds. Peel bananas and cut each into 3 or 4 diagonal pieces. Roll in flour. Dip into Fritter Batter, completely coating the banana pieces with the batter.

Deep-fat fry in the hot fat 4 to 6 minutes, turning fritters frequently to brown evenly. Drain on a rack. Six to eight servings.

Serve Banana Fritters very hot with the main' course or serve them as a dessert with a hot orange or other fruit sauce or with sweetened whipped cream.

## To make the Bafter

1 cup siffed flour
2 teaspoons boking powder
$11 / 4$ teaspoons salt
2 teaspoons melted shortening

Sift together flour, baking powder, salt and sugar. Combine egg, milk and shortening. Add to dry ingredients and mix until batter is smooth.

This is a stiff batter, and it makes a crisp fritter which will stay crisp for 15 to 20 minutes. This batter should not be "thinned down."

## To make Orange Sauce

$1 / 2$ cup sugar I tablespoon cornstarch Dash of salt
Dash of cinnamon
$3 / 4$ cup boiling water 2 tablespoons butter $1 / 4$ cup orange |uice 1 leaspoon grated orange rind 1 teaspoon lemon iuice

Mix together sugar, cornstarch, salt and cinnamon. Add water gradually. Bring to a boil and cook about 5 minutes, or until sauce has thickened, stirring constantly. Add butter, orange juice, orange rind and lemon juice. Re-heat to boiling point. Makes about 1 cup of sauce.

## HAM BANANA ROLLS with Cheese Sauce <br> 6 thin slices bolled ham <br> Prepared mustard <br> 6 firm bananas 2 tablespoons molted butter Cheose Sauce

Use all-yellow or slightly

green-tipped bananas

Spread ham lightly with mustard. Peel bananas. Wrap slice of ham around the banana. Brush tips of bananas with butter. Place Ham Banana Rolls into a shallow baking
dish and pour Cheese Sauce over them. Bake in a moderate oven $\left(350^{\circ} \mathrm{F}\right.$.) 30 minutes, or until bananas are tender . . . easily pierced with a fork. Serve hot. Six servings.

## CHEESE SAUCE

$11 / 2$ tablespoons butter
$11 / 2$ toblespoons flour

Melt butter, add flour and stir until smooth. Stir in milk slowly. Add cheese and cook, over low heat, stirring constantly until sauce is smooth and thickened. Pour over Ham Banana Rolls. Makes about 1 cup sauce.
$3 / 4$ cup milk
$11 / 2$ cups grated A merican Choese


## BANANAS . . . HOW TO SERVE THEM

 and BANANA SALAD BAZAAR.Here's how to reach me . . .
NAME.
ADDRESS.
CITY

STATE.


## BANANA MILK SHAKE

## 1 fully ripe banane 1 cup COLD milk

Use fully ripe bananasyellow peel flecked with brown Peel banana. Slice into a bowl and beat with a rotary egg beater or electric mixer until smooth and creamy. Add milk and mix thoroughly. Serve COLD. Makes 1 large drink or 2 medium-size drinks.


BANANA SHORTCAKE
Use fully ripe bananasyellow peel flecked with brown Split into 2 layers, homemade or baker's gingerbread, cake, cupcakes or biscuits. Place whipped cream and sliced ripe bananas between lay-


## BROILED BANANAS

## 6 firm bananas <br> 2 tablespoons metted butter Salt

## Use all-yellow or slightly green-tipped bananas

Peel bananas. Place on broiler rack or into pan. Brush well with butter and sprinkle lightly with salt. Broil 6 to 10 minutes, or until bananas are brown and tender . . . easily pierced with a fork. Six servings.
Serve very hot as a vegetable.
ers and on top. Garnish with a cherry, if desired.
Peel and slice additional bananas crosswise on the bias, just before serving, and arrange them around the Banana Shortcake, if desired.

## BUSINESS REPLY CARD

No Postage Stamp Necessary if Mailed in the United States
POSTAGE WILL BE PAID BY

## CMIGUITA banama

## UNITED FRUIT COMPANY

## PIER 3, NORTH RIVER

## THE ETERNAL GRAB

One day Abraham Lincoln was walking along a street in hls home town of Springfield, Illinois, with his two small sons, both of whom were crying lustily.

A neighbor stopped and inquired, "What is the matter with the hoys?"
"Just the same as what's the matter with the whole world!" replied Lincoln. "I've got three walnuts and each one of the boys wants two." Magazet

## TO GROW OLD

In a book published on the subject of longevity (printed in 1709 by James Eaton of Salishury, England) some circumstances are occasionally mentioned regarding the food and the hahlts of persons who lived incredibly long. The following seem best entitled to notice, and if they prove anything it would seem to be the consistent inconsistency of what keeps people from dying.

1. John Huffey, 116. For 50 years his breakfast was halm tea sweetened with honey and pudding for his dinner. 2. Judith Bannister, 108. Last 60 years of her life lived upon biscuit and apples. 3. John Rlva, 116. Always chewed citron-hark. 4. Elizabeth Machpherson, 116. Her diet was buttermilk and greens. 5. Fluel1yn Price, 108. Herb tea for breakfast, plain meat for dinner. nought but a pipe of tobacco for supper. 6. Mr. Cateby Smith, 103. He drank only buttermilk. ${ }^{7}$. William Riddle, 115. His chief subsistence was bread infused in spirits and ale. 10. The Honorable Mrs. Watkins of Glamorganshire, 110. For her last 30 years she subsisted entirely on potatoes.
Selections from THE TRIBUNE PRIMER by Eugene Field

## The Humorous Boy

This man is a School Teacher. He is going to Slt Down in the Chair. There is a Bent Pin in the Chair. and it will Bite the School Teacher. The School Teacher is a very able Man, and he will find it out as soon as the Bent Pin Tackles IIm. Will the School Teacher rise again? We should smile. But the School Teacher will not smile. He will play a Sonata with the Ferrule on the Boy's Back. The Boy put the Bent Pin in the Chair. He is trying to he a Humorist. When the School Teacher gets Through wlth him, the Boy will Eat his Meals from the Mantel-Piece for a Week.

## The Mud

The Mud is in the Street. The Lady has on a pair of Red Stockings. She is trying to cross the Street. Let us all give Three cheers for the Mud.

The Unfortunate Mousie
Poor little Mouse. He got into the Flour Barrel and Made Himself Dead. The cook baked lim in a Loaf of Bread, and here he lles cut in two by the Sharp bread knife. But we will not Eat poor Mouse. We will eat the Bread, but we will Take the Mousie and Put him in the Cistern.

## The Lap

The Mother has made a Lap. The Boy is in the Lap. He is Looking at the Carpet. What has the Mother in her Hand? She has a Shingle in her Hand. What will she Do with the Shingle? She will Put it Where it will Do the Most Good.

## The Nasty Oil

Do not take the Castor Oil. It is very Nasty and will Make you Sick. Mamma wants you Take it so you Will be Sick and can't Go out and Play with the other Boys and Girls. If Mainma will give you a Velocipede and a Goat and Top, then you may Take the Castor Oll and it will not Hurt you.

## FOR P. T. BARNUM

The old Farmer has apparently an authentic report of a threecolored cat (male), which the owner will be glad to show to P. T. Barnum's ghost upon request. Many of us will recall that over a considerable period of years, Mr. lBarnum unsuccessfully offered a huge sum for such an oddity.

## WELL KEPT

In a manuscript by one Abraham Grey, who lived about the middle of the sixteenth century, it is stated that in 1569, three Roman soldiers, in the dress of their country, fully equipped with warllke instruments, were dug out of a moss of a great cxtent, called Kazey moss. When found after a lapse of probably about fifteen hundred years, they "were quite fresh and plump."

## MODESTY

We hear of a certain lady so modest that she turned her washerwoman out for putting her clothes in the same tub with the pantaloons of a young gentleman.

## WORD CHARADES

## (Solutions on page 79)

My first a holy man or maid,
Sought peace in hermit cell;
My second by the Norsemen bold,
Was thonght in streams to divell.
My third, in our surprise or joy, Is but an exclamation;
My last in kirtle and in snood,
Is of the Scottish nation.
My whole has been to clildren dear
For many a Christmas season;
And if I fail to please them now,
I've neither rhyme nor reason.
My first you will certainly find on the farm,
If the drops have been good this year;
My second you sometimes will find in the brooks,
When the season is cold and drear;
My whole by the builder is carried aloft,
By the architect skillfnlly planncd,
For the mansion, the court-house or palace, perhaps,
An ornament gracefnl or grand,

## 3

(First)
A vessel whicl a voyage made,
When other craft all failed;
It floated o'er the tops of trees, And over mountains sailed.
(Second)
A workman, one who works with skill
At grood and nseful trade :
Some use a mallet and a drill,
Some are of higher grade.
(Whole)
My whole among inventors, stood
In foremost rank of all;
By his inventions did much good;
Please now his name recall.
4
When I'm wholc, I do not care
Whether the days be dark or fair
I do not care for crops or grain,
For pipes or horses or champagne,
Or what I eat or what I wear.
I care not though my fricnds declare
My first is calm. l'm in despair.
And cheerfuness I cannot feign When I'm my whole.
Consequent joys I'll quadly spare; I'd rather be my last elsewhere,

Haply within my own domain. And though I'm really not profane
I almost feel obliged to swear When I'm my whole.

## $\overline{5}$

A soldier of the rebels lay dying in the field;
A brave but stnrdy fighter, he conld fail but could not rield.
But a comrade stood beside him while his life-blood trickled fast,
And bent with pitying glances, to wrap him in my last,
Seeking his country's glory, e'en in the cannon's mouth.
Though in the midst of bloodshed, my first stood for the South.
The dying soldier faltered as he took his comrade's hand,
Saying, "Make my whole, my brother, it is my last command."

## 6

A well-known ballad has rehearsed
The placid waters of my first. The hero bold, his noble friend, The heroine's sad, untimely end, Why by a traitor was immersed Beneath the waters of my first. Another ballad $I$ could name Describes the doings of a dame; Her home-life and her walks abroad,
And her companions. We are a wed
At all the tales her memories tell,
And what strange happenings befell.
'Tis said that she went to my last.
Now this we know: that if she passed
Into my last, and didn't hand
My last, according to demand.
'Twas net my last, and we may say
She was a deadhead in her day.
My whole's desired by everyone
From day to day, from sun to sun.
For it we pray, we work, we earn;
Look out for it at every turn.
And when at last we ve had our day,
My last my first we'll have our say.

Credits: Charades 1, 2. and 3 from St. Nicholas 1874 . Charades 4. 5 , and 6 from The $\operatorname{sign}$ of the Sphinx, series First and Second, by Carolyn Wells.

## OLD FASHIONED PUZZLES

(Answers appear on page 79)

## 1. Eliipses

(Fill the blanks with the same words transposed)

1. He sits and over his
2. The poor child could ouly through her
3. They kept on the
as to
their position.
4. With his he killed three
5. $\qquad$ sometimes wound
worse than
6. The flew to the for shelter.
7. The $\qquad$ was walking on the
8. She was very clean and had much

## 2. Star Puzzle

Arrange eight words, having the following significance, so as to read the same up and down, vertically; east and west, horizontally; and, diagonally, right and left, up and down.

1. To indent. 2. To put on. 3. To broach. 4. To marry. 5. Extremity. 6. To bend the head. 7. Convenient. 8. Moisture.

## 3. Puzzle

I am useful on the farm, and on shipboard. Transpose me, and I am out of place on your tables. Change me to my original form and remove my middle, and I become part of your face. What ain I?

## 4. Add and Think Puzzle

Take fifty, add a cipher, add five, add the fifth of elght, and the total is the sum of human happiness. (The Romans had an answer for this.)

## 5. Arithmetical Puzzle

Three persons own 51 quarts 'of rice, and have only two measures; one a four quart, the other a seven quart measure. How shall they divide it into three equal parts?

## 6. Another one

In what manner may the first 25 be arranged so that the sum of each row of five figurcs may equal 65?

| 1 | 10 | 12 | 18 | 24 |
| :---: | :---: | :---: | :---: | :---: |
| 9 | 11 | 20 | 22 | 3 |
| 13 | 19 | 21 | 5 | 7 |
| 17 | 23 | 4 | 6 | 15 |
| 25 | 2 | 8 | 14 | 16 |

## 7. A Backward Story

(If you can't correct this in ten minutes, you are in the editor's class.)
(In the following story, thirtyeight of the one hundred and forty-three words are spelled backwards. When they are corrected, the narrative becomes clear.)

A beautiful girl had a new close to the very pot trap of her head.
"Tub," said she, "it does not ram it much, at least ton when I nod my ten."

When she was her mother and lover ward near, she was glad the ten saw a good tif. Besides, as the sag was ton lit, the moor was mid. Once, being startled out of a lan by thrunder, she bumped the new tub she went where there saw a wolf of cold water and held it under.
"Trips, water!" said she, faint as a wounded reed, and then she went for den. Den was a orgen doctor. He put no rat, which was teem, but her am saw dam, becaunse it was trot trap wather. However, it cured her, and won she yam wear her ten or ton, as she pleases.



## YANKEE PORK ANO BEANS

Pick over carefully a quart of beans and let them soak overnight. In the morning wash and drain in another water and put on to boil in cold water with half teaspoon soda; boil about thirty minutes, drain and put in earthenware pot. Add three tablespoonfuls molasses. When the beans are all in the pot put about three quarters of a pound of salt pork in the center. (Score pork in slices or squares.) Season with salt and pepper... cover all wlth hot water and bake for six hours or longer $\ln$ a moderate oven adding more water if needed. Keep bean pot covered so that they will not burn on the top, but remove cover about two hours before serving so that the top will brown and the pork will crisp.

Just as tea and lemon go together . . . so do baked beans and brown bread.

## STEAMED BOSTON BROWN BREAD

1 cup gralıam four
1 cup rye flour
1 cup white flour
1 cup cornmeal
1 teaspoon salt

1 teaspoon baklng soda
$1 / 2$ cup brown sugar
$1 / 2$ cup molasses
4 cups cold water
1 cup raisins

Mix and slft the dry ingredlents, stlr in the molasses and the water and raisins. Pour into buttered brown bread mould. Cover and steam for three hours.

## FRESH GREEN PEA SOUP

1 qt. green peas
1 onion sliced
1 pt. hot water
2 T. butter

1 T . flour
1 cup mllk
1 cup cream

- Cover peas with hot water, add onion and cook until the peas are tender enough to be mashed. Press through a sieve and add 1 pint of hot water. Blend butter and flour, cook a few minutes but do not brown. Add the peas, milk and cream. Season with salt and pepper and allow to come to a boll. Straln and serve hot. Serves about 8 .


## MOTHER'S BAKED SUGAR CURED HAM

6 large sweet potatoes 1/2 cup pineapple juice 2 pounds coolied ham, sliced

3 apples
1/4 pound butter
1/2 cup lioney

Boil the potatoes with the skins on for about 30 minutes. Peel and mash thoroughly. Add the pineapple juice and mix well. Butter a large baking dish and place a thin layer of the mashed potatoes on the bottom. Place a slice of ham on top of the potatoes then cover the ham with thin slices of fresli apples. Sprinkle with salt, dot with butter and honcy. Repeat until all the ingredients have been used up. The top layer should be the sweet potatoes. Sprinkle wlth melted butter and bake in a $350^{\circ}$ oven for about 1 hour.


## GOOD STOVES



## MODER

 and-JUST GOOD STOVES for COAL•WOOD•OIL and GAS (City or Bottled) Outline your needs and ask for CATALOG 21

## CLAM PIE

Take three pints of either hard or soft shell clams and chop fine. Put in a sauce pan and bring to a boil in their own liquor, or add a little water if needed. Have ready four medium sized potatoes boiled until done and then cut into small squares. Line a casserole with pastry. Add a layer of clams, then potatoes and season with butter and sait and pepper and then dredge with flour. Add another layer of clams until the dish is filled. Cover with the top crust and bake in hot oven for about one half hour.

## CHEESE AND POTATO FRITTERS

3 cups hot mashed potatoes
1 T. four
$3 / 4$ cup fresh milk
$1 /$ teas. chopped parsley
$1 / 4$ cup grated American cheese

1 egg well beaten
3 T . bread crumbs
1/2 T. butter, melted
Salt and pepper

Combine the ingredients in the order given. Beat well and drop by the spoonful into deep hot fat ( $375^{\circ} \mathrm{F}$.) and then drain on brown paper.

## MOLASSES PECAN CUSTARD PIE

3 eggs well beaten
1 cup sugar
1 cup molasses
$1 / 2$ cup butter
$11 / 2$ cups chopped pecan meats
$1 / 4$ teas. salt
1 teas. vanilla
Pie Pastry

Beat eggs thoroughly and add the sugar gradually beating well each time. Add molasses, melted butter, nutmeats, salt and vanilla. Pour the mixture into a nine inch pie tin lined with pastry. Bake for ten minutes in a $40^{\circ} 0^{\circ} \mathrm{F}$. oven and then lower heat to $325^{\circ} \mathrm{F}$. and bake until firm or for about thirty minutes. Top with whipped cream.

## UNCOOLED WINTER RELISH

$11 / 2$ cups celery chopped medium fine
$1 / 2$ cup green pepper, chopped
2 teas. salt
$11 / 2$ cups cooked bects
$1 / 3$ cup horseradish
$1 / 2$ cup brown sugar
Cold cider vinegar

Combine the ingredients in the order given. Place in a jar, cover closely and let stand for at least 24 hours.

## SALTY SEA FRENCH TOAST

1 cup cooked shredded fish
$3 / 4$ cup medium white sauce White bread

3 eggs
$1 / 2$ cup milk
Frying fat

Combine the fish with the white sauce. Lemove the crusts from the bread and spread with the fish mixture. Toy with another slice of bread to form a sandwich. Beat the eggs, ard the milk and dip in the fish "sandwiches" drain and fry in just enough fat to kecp from sticking to the pan.

## REFRIGERATOR ROLIS

3 T. shortening
2 cups lukewarm water and milk
2 yeast cakes
$1 / 2$ cup sugar
$1 / 2$ cup sugar

1 teas. salt
1 egr beaten

Melt the shortening and place in a bowl with warm water and milk, yeast cakes, sugar, salt and egg. Mix thoroughly. Add half of the Hour and beat. Fold in remaining flour. Let rise until double in bulk and then "punch down" and chill in refrigerator. Allow dough to rise before baking.

## KITCHEN QUANTITIES

## (FOR THE HOUSEWIFE)

DRAWER AND PANTRY



## EQUIVALENTS



## CUT MEAL COSTS IN HALF



## Taste The Old-Time Goodness Of New England's

 Favorite Food(In glass, or tin)
Give your family an extraspecial treat while making big meal-cost savings by serving frequent meals of $B \& M$ Brick-Oven Baked Beans. They're baked (not steamed) for one entire day with lots of pork and spicy sauces, baked mealy and tender the true New England way ... in famous Burnham \& Morrill ovens "Down East" in Portland, Maine.

## APPROXIMATE OUTDOOR PLANTING, GROWING, AND HARVESTING TABLES

I. LATITUDE OF BOSTON, MASSACHUSETTS
(ADD ONE WEEK EVERY 100 MILES NORTH OR 500 FEET ELEVATION).
Date to plant *****. Time of Growing 00000. Harvest Season xxxx.
Most early planting dates are for starting seedlings indoors.
E means Early. L means Late.


Table I - Continued

| Crop |  | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Seeds Per Acre | Moon Most Favorable |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Tomato |  |  |  |  |  |  | 0000 | 0000 | xxxx | xxxx | $\mathrm{x} \times \mathrm{xx}$ | xxxx |  | $\left\lvert\, \begin{aligned} & 3 \mathrm{oz} . \text { for } \\ & 3 \mathrm{M} \\ & \text { plants } \end{aligned}\right.$ | 5.27 |
| Turnip | E |  |  |  | *** | 0000 | 000x | *x* | ${ }_{\text {** }}^{00}$ | 000 $x$ | x.xix | x |  | $\begin{aligned} & 1 \mathrm{laz} \text { for } \\ & 100 \mathrm{ft} \mathrm{dr} \\ & 3 \mathrm{lbs} . \end{aligned}$ | $4.12-19$ $7.10-18$ |
| Wheat Fall Spring |  |  |  |  | $\begin{array}{r} 0000 \\ * * * \end{array}$ | $\operatorname{xxxx}_{*}^{\infty}$ | $\begin{aligned} & x \times x \\ & 0000 \end{aligned}$ | 0000 | 0000 | 0000 | $* * *$ xxxx | $\begin{aligned} & 0000 \\ & \mathrm{x} \end{aligned}$ |  | 2 bu. | $\begin{aligned} & 10.21-28 \\ & 4.28-30 \end{aligned}$ |

## APPROXIMATE OUTDOOR PLANTING, GROWING, AND HARVESTING TABLES

II. LATITUDE OF PHILADELPHIA, PENNSYLVANIA.
(Add one week for every 100 miles north or 500 feet elevation).
Date to Plant *****. Time of Growing 00000 . Harvest Season xxxxx.
E means Early. L means Late.


Table II - Continued


## APPROXIMATE OUTDOOR PLANTING, GROWING, AND HARVESTING TABLES

III. LATITUDE OF ATLANTA, GEORGIA.
(Add one week every 100 miles north or 500 feet elevation).
Date to Plant *****. Time of Growing 00000. Harvest Season xuxxx.
E means Early. L means Late.


## GYPSY NOTION

Of the assoeiations most of us have with the gypsy eostulle, ear rings perhaps stand out the strongest. Many women wish to run right out and dress up, too-gypsy ear ring style-after having seren the effect of the gold against the brouzed gypsy skin. Few realize however that the gypsies make quite a fuss about having their ears piereed. Some will not have it done when the plums are ripe. Others will not submit to piercing wheu the weather is cold. Still others have their faneies as to the time of the moon for piereing. So when should jou do it? Consult your nearest gypsy!

The new trend in Craftsman's jewelry for country and office wear made of pure copper and of silver on copper, finished in high lustre and lacquered to resist tarnish. Prices and sketches on request.

Gift Shops specializing in Handcrafts allowed regular discounts.

Privare agents available to large groups allowed good commission.
Samples on memorandum to agents in desirable locations.

## MARY TUCK <br> Brookfield, Conn.

PRICES SLASHED! ALUMINUM PIPES
$\$ 4.50$ pipe for $\$ 1.00$. Imported briar bowl, hard rubber stem, air cooled aluminum shank, straight or curved. No filters required. A perfect C. O. D. orders Xmas gift. Check or money filled on request order. We pay postage. Write catalog of pipes and cigars.

## Satisfaction Guaranteed

Eddie THE CICAM NiAN
 *


Make money. Know how to break and traln horses. Write today for this book FREE , together Fith special offer of a course in Animal Breeding. If you are interested in Gaiting and RIding the saddle horse, check here ( ) Do it today-now.
BEERY SCHOOL OF HORSEMANSHIP Dept. 108-A

Pleasant HIII, Ohlo

## FORECAST the WEATHER with this <br> CAPE COD WIND-INDICATOR!

-It's the newest home weather Instrument. The vane, on your roof, flashes the wilnd direction to you indoors, by lighting the letters on the decorative black and gold dial. It plugs into regular house current (A.C.). Accurate. fully guaranteed, complete with fifty feet of wire, and a cony of the handy Weather Forecaster's Guide. Send for yours todayl
mail check or monev order to: CAPE WIND-INDICATOR Old Harbor Lane. Harwichport, Mass.


## FREE CATALOG! <br> AIDS TO OWNERS OF HOME FREEZERS

HOOT MON - I'M MAC. the friend of folks who want to do the best job of home freezing -and money saving!

Do the job easier - faster - better! You'll find hundreds of preparing, packing and storing helps at MacAdam's. Special cartons, bays, wrappings, tapes, sealers, preservatives, etc.-many aids you may never have heard of. For everything to help you do a better job, rely on MacAdam - frozen food nack. ages headquarters for the nation. Write to Dept. FA.

## STATE EXTENSION DIRECTORS

Consult these men about your garden and farm problems. They know the answers.
(Courtesy-L. A. Schlup-Division of Extension Information)

## State

Alabama:
Arizona:
Arkanalas:

Callfornia:
Colorado:
Connecticut:
Delaware:
Florida :
Georgia :
Idaho:

Illlnois:
Indiana:
Iowa:
Kansas:
Kentucky
Louisiana:

Maine:
Maryland:
Massachusetts:
Michigan:
Minuesota:

Misslssipni:
Missouri :
Montana:
Nebraska:
Nevada:
New IIampshlre:
New Jersey :

New Mexico:
New York:
North Carolina:
North Dakota:
P. O. Davis, Alabama Polyteehnie Institute, Auburn.
C. U. Plekrell. University of Arizona. Tucson.
(Lippert S. Ellis, College of Agriculture, University of Arkansas, Fayetteville.
*(Aubrey D. Gates, Associate Director, P. O. Box 391, Little Rock.
B. II. Crocheron, College of Agriculture, University of California. Berkeley 4.
F. A. Anderson. Colorado Adricultural and Meellanical College, Fort Collins.
R. K. Clapp, Associate Director, University of Connecticut, Stors.
G. M. Worrilow, Director, University of Delaware. Newark.
H. G. Clayton, Agricultural Extension Service, Experiment Station, Gainesville.
Walter S. Brown, Georgia State College of Agriculture, Athens.
D. R. Theophilus, College of Agriculture, University of Ilaho, Moscow.
(C. O. Youngstrom, Assistant Direetor, State House, Boise)
H. P. Rusk, College of Agriculture, University of Illinois, Urbana.
H. J. Reed, Purdue Unlversity, LaFayette.
H. H. Kildee, Iowa State College of Agriculture and Mechanic Arts, Ames.
L. C. Williams, Kansas State College of Agriculture and Applied Science, Manlattan.
T. P. Cooner, College of Agriculture, University of Kentucky, Lexington 29.
H. C. Sanders, Louisiana State University and Agricultural and Mechanical College. University Station. Baton Rouge 3.
A. L. Deering, College of Agriculture, University of Maine, Orono.
T. R. Symons, University of Maryland, College Park.
W. A. Munson, Massachusetts State College, Amherst.
C. U. Ballard, Michigan State College of Agriculture and Applied science, Cast Lansing.
Paul F. Miller, Department of Agriculture of the University of Miunesota, University Farin, St. Panl 8.
L. I. Jones, Mississippi State College, State College.
J. W. Burch, College of Agriculture, University of Missouri, Columbia.
IR. B. Tootell, Montana State College of Agriculture and Mechanic Arts, Bozeman.
F. G. Gould, Acting Director, College of Agriculture, University of Nebraska. Lincoln 1.
C. W. Creel, Agricultural Extension Division, University of Nevada. Reno.
H. B. Stevens, University of New Ifampshire, Durlam.
(IV. II. Martln. State College of Agricnlture and Mechanic Arts of Ritgers University, New Brunswick.

* (L. G. Cook. Associate Director, College of Agriculture, New Brunswick.
H. R. Varney, New Mexlco College of Agriculture and Mechanic Arts. State College.
L. R. Simons. New York State College of Agriculture. Ithaca.
I. O. Schaub. State College Station. Ralelgh.
E. J. Haslerud. North Dakota Agricultural College, State College Station, Fargo.

Ohio:
Oklahoma :
Oregon:
Pennsylvania:
Rhode Island:
South Carolina:
South Dakota :

Tennessee:
Texas:
Utah:
Vermont:
Virginia:
Washington:
West Virginla :
Wisconsin:
Wyoming:
H. C. Ramsower, College of Agriculture, Ohio State University, Columbus 10.
Shawnee Brown, Oklahoma Agricultural and Mechanical Collegc, Stillwater.
W. A. Schoenfeld, Oregon State Agricultural College, Corvallis.
J. M. Fry', Lennsylvania State College, State College.
H. O. Stuart, Rhode Island State College, Kingston.
D. W. Wathins, Clemson Agricultural College of South Carolina. Clemson.
George I. Gilbertson, Director, South Dakota State College of Agriculture and Mechanic Arts. Brookings.
C. E. Brelim, College of Agriculture, University of Tcnnessee. Knoxville 7.
Ide P . Trotter. Director, Agricultural and Mechanical College of Texas, College Station.
Dr. Carl Frischknecht, Utah State Agricultural College, Logan.
J. E. Carrigan, College of Agriculture, University of Vermont, Burlington.
L. B. Dietrick, Virginia Polytechnic Institute, Blacksburg.
E. V. Ellington, State College of Washington, Pullman.
J. O. Knapp, College of Agriculture, West Virginia University, Morgantown.
W. W. Clark, Associate Director, College of Agriculture, University of Wisconsin, Madison 6.
A. E. Bowman, College of Agriculture, University of Wyoming, Laramie.
*All general correspondence is conducted by the associate director.

## A TABLE FOR TELLING THE WEATHER THROUGH ALL THE LUNATIONS OF EACH YEAR FOREVER



| Time of Change | In Summer | In Winter |
| :---: | :---: | :---: |
| om Midnight to 2 A.M. | Fair | Hard frost, unless wind be S. or W. |
| (om 2 A.M. to 4 A.M. | Cold, with frequent showers | Snow and stormy |
| 4 A.M. to 6 A.M. | Rain | Rain |
| om 6 A.M. to 8 A.M. | Wind and Rain | Stormy |
| m 8 A.M. to 10 A.M. | Changeable | Cold Rain if wind be W.; Snow if E. |
| m 10 A.M. to Noon | Frequent Showers | Cold \& high wind. |
| Noon to 2 P.M. | Very rainy | Snow or rain. |
| m 2 P.M. to 4 P.M. | Changeable | Fair \& mild. |
| 4 P.M. to 6 P.M. | Fair | Fair. |
| m 6 P.M. to 8 P.M. | $\begin{aligned} & \hline \text { Fair- IT wind } \\ & \text { N.W. Rain- if } \\ & \text { S. or S.W. } \end{aligned}$ | Fair \& frosty if wind N. or <br> N.E.: Rain or snow if wind <br> S. or S.W. |
| \% 8 P.M. to 10 P.M. | Same as from 6 P | M. to 8 P.M. |
| m 10 P.M. to Midnight | Fair | Fair \& frosty. |

The nearer the time of the moon's change, first quarter, full, or last quarter is to midnight, the fairer the weather will be during the seven days following. (10 P.M. - 2 A.M.).

The nearer to noon the more foul or wet weather is to be expected. ( 10 A.M. to 2 P.M.).

Spring and autumn are affected nearly in the same ratio as summer and winter.

Farmers \& Mechanics Manual, 1874

## Before you buy any Heating System be sure to read this interesting book!



Your heating system should be a basic consideration when you're building or remodel. ing. "Enjoy better living with RadiantSunny Warmth" will help you choose wisely ... tells what every type of heating system offers... how to get dependable, efficient, economical heat. Send for this home-heating guide today - it's FREE!

## UTICA Heating Systems provide lifetime comfort

Hot water or steam . . . coal or oil...there's a modern, efficient Utica Radiator Heating System to meet your requirements . . . for the present and the future! When you install a Utica Heating System you can rest assured it will serve you well-and long.

Get a heating estimate without obligation


Utica Radiators

If you would like an estimate on a complete Utica Heating Systerm, writefor the name of our nearest dealer. He'll make a survey of your heating requirements . . . . without obligation 1

Utica Radiator Corporation The Finest in Home Heating Equipment Ufica 2, New York

## Tables of Measures

## (English Units)

## Linear Measure

1 foot=12 inclies
1 yard=3 feet
1 rod $=5 \frac{1 / 2}{}$ yards $=16 \frac{1 / 2}{}$ feet
1 mile $=320$ rods $=1760$ yards $=$
5280 feet
1 nautical mile $=6080$ feet
1 knot=1 nautical mile per hour
1 furiong $=1 / 8$ mile $=660$ feet $=$
220 yards
1 league $=3$ miles $=2 \pm$ furiongs
1 fathom=2 yards=6 feet
1 chain= 100 liuks=22 Jards
1 link $=7.92$ inches
1 hand $=\frac{4}{4}$ inches
1 span=9 inches

## Square Measure

1 square foot $=144$ square inches
1 sq. yard $=9$ sq. feet
1 sq . rod $=301 / 4$ sq. vards $=$
2721/4 sq. feet
1 acre $=160 \mathrm{sq}$. rods $=43560 \mathrm{sq}$. ft.
1 sq. mile $=640$ acres $=$
102400 sq . rods
1 sq. rod $=625$ square links
1 sq. chain $=16$ square rods
1 acre $=10$ square chains

## Cubic Measure

1 cubic foot $=1728$ cubic inches
1 cubic yard=27 cu. feet
1 register ton (shipping measure) $=100$ cubic feet
1 U. S. shipping ton $=40 \mathrm{cu} . \mathrm{ft}$.
1 cord $=128$ cubic feet
1 U. S. liquid gallon $=4$ quarts $=231$ cubic inches 1 imperial gai. $=1.20 \mathrm{U}$. S. gals. $=0.16$ cubic feet
1 board foot $=144$ cubic inches
(Metric Units)

## Linear Measure

1 centimeter $=10$ millimeters
1 decimeter $=10$ contimeters
1 meter $=10$ decimeters
1 dekameter $=10$ meters
1 hektometer $=10$ dekameters
1 kilometer $=10$ hektometers
1 inch $=2.54$ centimeters
1 meter $=39.37$ inches
1 yard $=0.914$ meters
1 mile $=1609$ meters $=$
1.61 kilometers

## Square Measure

1 square centimeter $=$
100 square milimeters
1 sq . decimeter $=$
100 sq. centimeters
1 sq . meter $=100 \mathrm{sq}$. decimeters $=$
1 centar
1 ar=100 centars
1 hektar $=100$ ars
1 sq. kilometer $=100$ hektars
1 sq. centimeter $=0.15$ sq. inches
1 sq . meter=1.20 sq. yards
1 sq. kilometer=0.39 sq. miles
1 hektar $=2.47$ acres
1 sq. inch $=6.45 \mathrm{sq} . \mathrm{cm}$.
1 sq. yard $=0.84 \mathrm{sq}$. m.
1 sq. mile $=2.59 \mathrm{sq} . \mathrm{km}$.
1 acre $=0.40$ hektars

## Cubic Measure

1 cubic centimeter $=$
1000 cubic millimeters
1 cu . decimeter=
1000 cu . centimeters
1 cu. meter $=1000$ cu. decimeters
1 cu . yard $=0.76$ cubic meters
1 cu. meter $=1.31$ cubic yards
1 liter $=1.06$ U. S. liquid quarts
1 hektoliter $=100$ liters $=$
26.42 U. S. liquid gallons

1 U. S. liquid quart $=0.94$ liters
1 U. S. liquid gallon $=3.76$ liters

## Weights

## Anoirdupois

1 pound=16 ounces
1 huudredweight $=100$ pounds
1 ton=20 hundredweight $=$
2000 pounds
1 long ton $=2240$ pounds

## Troy

(Used in weighing gold, silver, jewels)
1 pennyweight $=24$ grains
1 ounce $=20$ pennyweight
1 pound $=12$ ounces

## Apothecaries

1 scrupie $=20$ grains
1 dram=3 scruples
1 ounce $=8$ drams
1 pound $=12$ ounces

## Metric

1 centigram $=10$ milligrams
1 decigram $=10$ centigrams
1 gram=10 decigrams
1 dekagram=10 grams
1 hektogram $=10$ dekagrams
1 kilogram $=10$ hektograms
1 metric ton $=1000$ kilograms
1 kilogram= 2.20 pounds
1 pound avoirdupois $=$
0.45 ixilograms


It's a great name ... on the road
. . . on the farm . . . in the home!
American Oil Company

## PRINCIPAL HOLIDAYS, ETC. IN 1949

America has no natiouwide holidays. Each state determines its own. In the table that follows (*) indicates these quite generally observed by all states; (**) indicates those for only certain states; and (***) indicates days usually observed in some localities though probably not observed as holidays. Only continental United States is covered here. These dates are also all indicated on right hand calendar pages in abbreviated forn.

Jan. 1 (*) New Year*s Day
Jan. 8 (**) Hattle of New Orleans
Jan. 19 (**) Robert E. Lee's birthdas
Jan. 20 (**) Inaucural Day (D.C.) Jan. 26 (**) MacArthul Day (Ark.)
Feb. 4 (**) Arbor Day (Ariz.)
F'els. 12 (**) Abraham Liucoln's Birthday
Feb. It (**) Admission Day (Arizona)
Feb. it (***) Valentine's Day
Feb. 15 (***) Susan B. Anthony Day
Feh. 22 (*) George Washington's Birthelay
Mar. 1 (**) Mardi Gras
Mar. 1 (**) State Day (Nebraska)
Mar. $2(* *)$ Texas Independence Day
Mar. 7 (**) Burbank Day (Cal.)
Mar. 15 (**) Jackson Day (Tennessee)
Mar. 17 (**) St. Patrick's or Eracuation Day
Mar. 25 (**) Maryland Day
Apr. $1\left(^{(* *)}\right.$ State Election (Michisan)
Apr. 6 (**) Army Day $^{(*)}$
Apr. 10 (***) Arbor Day (Neb.) 1872
Apr. 12 (**) Halifax Day (N. Car.)
Apr. $133^{(* *)}$ Jefferson Day (Mo., Okla., Va.)
Apr. 1t (***) Pan American Day
Apr. $15\left(^{* *}\right)$ Good Friday (Conn., Del.. Fla.. La., Ma., Minn., N. J., Penn. \& Tenn.)

April 18 (**) Easter Monday (N. C.)

Apr. $19\left(^{(* *)}\right.$ Patriots' Day (Me., Mass.)
Apr. $21\left({ }^{(* *)}\right.$ San.Jacinto Day (Texas)
Apr. 24 (**) Arbor \& Bird Day (Mass.)
Apr. $26\left(^{* *}\right.$ ) Memorial Day (Fla., Ga., Miss.)
Apr. 28 (**) Fast Day (N. H.)
May 4 (**) R. I. Independence

May 8 (***) Mother's Day
May 10 (**) Memorial Day (N. C. \& S. C.)
May 20 (**) Mecklenburg Day (N. C.)

May 22 (***) Nat'l Marine Day
May 30 (*) Decoration or Memorial Day
June 3 (**) Jefferson Davis Day $^{*}$ (Ala., Ark., Fla., Ga., La., Miss., S. C., Tenn., Tex. \& Va.)

June 14 (**) Flag Day (Mo. \& Pa.)
June 15 (**) Pioneer Day (Idaho)
June 17 (**) Bunker Hill Day (Suffolk County, Mass.)
June 19 (***) Father's Day
June 20 (**) West Virginia Day July 4 (*) Independence Day
July 13 (**) Forrest's Day (Tenn.)
July 2t (**) Pioneer Day (Utal)
Aug. 1 (**) Colorado Day
Aug. 4 (***) Coast Guard Day $^{* *}$
Aug. 16 (**) Bennington, Vt. Battle Day
Aug. 19 (***) National Aviation Day
Aus. 30 (**) Huey Long Day (La.)
Sept. 5 (*) Labor Day
Sept. 9 (**) Admission Day (Cal.)
Sept. 12 (**) Defender's Day (Md.)

Sept. 12 (**) Elcetion Day (Me.)
Sept. 17 (***) Constitution Day
Sept. $23\left(^{(* *)}\right.$ Am. Indian Day
Oct. 6 (**) Missouri Day
Oct. 12 (*) Columbus Day
Oct. 27 (***) Navy Day
Oct. 31 (**) Nevada Day
Nov. 1 (**) All Saints' Day (La.)
Nov. 8 (*) Election Day
Nov. 11 (**) Armistice Day
Nov. 23 (**) Repudiation Day (Md.)

Nov. 24 (*) Thanksgiving Day
Dec. $7\left({ }^{(*)}\right.$ Delaware Day
Dec. 21 (***) Forefather's Day
Dec. $2 \overline{5}$ (*) Christmas Day

$$
\begin{aligned}
& \text { SOMETHING NEW } \\
& \text { Make Your Own STUFFED DOLLS. } \\
& \text { Easy to make. We supply a Hand } \\
& \text { Painted DOLL FACE with MOVA- } \\
& \text { BLE EYES. } 4 \text { Heautiful faces for } \\
& \text { \$1 postpaid. Special prices on Dozen } \\
& \text { or Gross lots. Be Wise - Economize. } \\
& \text { Make a Hobby pay for you. WE } \\
& \text { ALSO SELLALL TYPESOF GLASS } \\
& \text { EYES. } \\
& \text { MODERN GLASS \& WIRESUPPLYCO. } \\
& 2458 \text { South Street, New York 2, N. Y. }
\end{aligned}
$$

YOU make them, we sell them! New liquid plastic makes many items! Terrific Demand! Earn minimum of $\$ 5.00$ per week at home. No experience or machinery required. We supply raw materials and instruction. Write Travaco Laboratories, P. O. Box 1883, Boston S, Mass.

## 125 PERSONAL POST CARDS \$1.00

Printed with your name \& address in blue ink on quality white stock. Just the thing for short notes. Size $31 / 2 \times 5 \frac{1}{2}$. Ideal for Gifts. Postpaid delivery 10 days. Sample

## THE COTTRELL PRINTING CO.

455 Parker Ave.
Hackensack 3, N. J.

## Do You Want Love and Marriage?

First step toward your goal is Friendship! Join a refined, confidential Correspondence Club and find your Happiness. Nationwide Membership. Ah ages. Write today for FREF details, sealed. Only sincere persons desired.

## FAMILY CIRCLE

526 East Riverside Ave. Evansville 13, Ind.

## fraded HAIR

Now you can shampoo and color your hair the same time with SHADPO-KOLOR, any shade. No dyed look, permits permanent. Simple, caution: use only as directed on label.-Most lasting. Write for Free Booklet. VALLIGNY PRODUCTS, INC.
Dept. 72-T, 254 West 31st Street, New York I, N. Y.

## CURIOUS FACTS

A flea can jump a height equal to 200 times its own stature.

The curious dwarf trees seen in China -oaks, chestnuts, pines and cedars, sometimes 50 years old and yet not a foot high-are produced by trimming the roots. The tap root is cut off a young plant, and if too much growth is threatened other roots are shortened, and every year the leaves grow smaller and at last a perfect tree in miniature appears.

In the year 1669 , at a term of court held in New Haven, Jacobeth Murtine and Sarah Tuttle were prosecuted. They were accused of "setting down on a chestle together, his arms around her waiste, and her arme upon his shoulder or about his neck, and continuing in that sinful posture about half an lour, in which time he kyssed her and she kyssed him, or they kyssed one anotlier, as ye witnesses testified."
A man named Chenworth. who lives in the village of Cowboy, Kan., owns a horse which he sends to a store three miles distant for provisions. A note tied to the horse's mane lias a list of the articles wanted. They are strapped in a bag to his back. The animal never stops to nibble grass, but goes the whole distance at a brisk trot.

## EYEGLASS CLEANiNG TISSUES

Specially treated, patented tissues clean off any smear perfectly - leave no lint. And they prevent misting. These handy, vest pocket booklets provide clear vision, make wonderful gifts. Give them - and use them!

9 BOOKLETS (year's supply) SEND $\$ 1$
CLEAN-OMIST, Box 660, Oradell, N. J.

## A CAT'S

## DEVOTLON

Some years back a London music hall proprietor owned a tabby, tortoise-sliell cat whicli liad a family of four kittens which he allowed her to keep in a basket at the rear of the stage. When the hall cauglit fire. the cat was seen to rush about frantically as lier kittens were on the other side of the fire from her. Finally she made a dash for them through smoke and flame-and one by one, brought three of them to safets-depositing each at lier master's feet. Exhausted, badly burned, she went back after the fourth, but never returned. After the fire her charred body was discovered next to the blackened remains of lier kitten.

This remarkable illustration of materinal devotion took place in Lusby's Music Hall in about 1885-and is the more remarkable because cats as a rule are not granted the compassion we humans are accustomed to allow the dog. and horse, and some other animals.

RUPTURE!
An amazing Air-Cushion Invention allows body freedom at work or play. Light, neat cool, sanitary Nature support weakened musclesgently but surely. Nature support Trial! Write NOW for free Booklet and Norisk Sent of Results. All correspondence confidential.
Brooks Company, 87 State St., Marshall, Mich.

SILVER TINT POLISII. It'S Hew-It's different. A double action polish for TARNISHED and COPIER showing articles. It plates as it polishes. For Tableware, Silverware, reflectors, refrigerators, jewelry, etc. Also satisfactory for the electro brush method. Enougli silver in silver tint paste for 200 small articles. Sample introductory 2.50 value' 1.25 . Limited time only. Refund cruaranteed.

Mazza's Clectro Chemical Service 398.1 Columbia St. Cambridge 41, Mass.


##  USED, WINTER, SPRING, SUMIMER

Assorted sizes 12 to 20 (large sizes 40 to $52 \$ 1.25$ each.) SEND NO MONEY. We mail C.O.D.; you pay regular price \$3.00 for 5 dresses plus Postage \& C.O.D. fees. Return within 5 days if not delighted, for refund of purchase price. FREE clothing catalog for entire family.

E-Z SALES CO.<br>Dept. OFA 49 St., N. Y. 2, N. Y.

303 E. Houston St.,

## 1949 CYPHER CONTEST

The number "6667" refers to two lines of type on a jage of this edition. For the best rliyme to go with these two lines not over 13 words long, prizes of $\$ 25.00, \$ 15.00$ and $\$ 5.00$ will be awarded respectively to 1 st , 2nd, and 3 rd choice by the judges. The Yankee Magazine staff will judge this contest and their derision is final. No entries returned and all remain the property of the Almanace All entrics must be received by March 1, 1949. Winners will be announced in the April 1949 issue of YANKEL Magazine and in the $19 \% 0$ Old Farmer's Almanac.

## BE COLOR-WISE! <br> USE "PERFECTION" DYES

## For All Home Dyeing and Tinting

New ALL-FiBRE PERFECTION DYEs color Wool, Silk, Cotton, Linen - Evell Nylon and All Rayons! No muss nor fuss.
44 lovely shades including REDGRAPE, NUGGET GOLD and WOOD ROSE. 15e per parkage, by mail postpaid. Color Card free.
PERFECTION DYES, DOVER-FOXCROFT, MAINE

## WANT TO MAKE A GOOD TRADE!

Could you use 9,999 potential customers . . . for your farm products-crafts-or business for as little as $\$ 17.99$ ?
rANKȨE Magazine

is one of the liveliest of all marketplaces. In its famous Original Yankee Swoppers' Coluntns and Display advertisements, people are trading everything from wives to battleships, from buttons to banjos. Most of the "ads" are fascinatingly "different" reading. Accompanied as they are by fine fiction, America's best poetry, beautiful photographs and drawings,-anecdotes, human interest features, etc.-excellently printed on glossy paper-you get full value for your money.

YANKEE's subscribers use this magazine to furcher their own businesses, hobbies, and pursuits of pleasure. You can do this too. Our offer is six one inch ads, and a year's subscription-all for $\$ 17.99$ -You send us $\$ 1.19$ for the sub-scription-and the copy for your ads ( 1 inch high by $2 \frac{5}{16}$ inches wide), tell us which months you want the ads to appear and we send you bill for each ( $\$ 2.80$ ) when it is published. YANKEE practises what it preaches. YANKEE advertisements and subscriptions cost less now than before the war. Now you know that is a good trade.

If you'd rather have a "look" first, ask us for a Sample Copy (no charge) or enclose a dollar for 7 months trial subscription. A postcard will do if you'd rather have us send bill.

THE ABOVE 17.99 COMBINATION OFFER APPEARS IN THIS PUBLICATION ONLY - IS GOOD FOR OFA READERS ONLY.

## YANKEE, Incorporated

## Dublin, New Hampshire

[Publishers of Yankee magazine and The Old Farmer's Almanac (k)]

## SCIENTISTS AT WORK

## Courtesy (in part)-U. S. Department of Agriculture

I. "The War of Food"

While much of the world remains mable to feed itself, while our populatiou and the world's (despite famine, and discase and war) increases as the amount of arable land and its tertility decreases, the need for bigger and better crops becomes most urgent. We rust, it is argued, therefore wage war on all enemies of crops-especially the insects. This means more insecticides. The number of these that have beeu experimented with is scarcely believable. In just the last five years no less than 10.000 chemical compounds have been tested. We issed to think of basic iusect killers as being kerosene, pyretrum, the arsenicals, nicotine and rotenone, but as this is writteu there are no less than eight new ones so deadly that we might well throw all the old ones away and not miss them at all. It is estimated that crop losses in the future should be cut no less than 25 percent and perhaps by as much as 75 percent. Coupled with this is the fact that many plant varieties resistant to diseases and insects are being developed. Agricultural scientists generally believe that the deadly new insecticides (and fungicides) and these new plant varieties will be important factors iu winning the war of food.

But they are not the chief factors. We are turning to these fungichdes and insecticides as an emergency measnre, and should recognize that they are in no sense a cure-all for our real trouble. Indeed they may in the loug ruu be getting us into more and more trouble, since it can be argued that the more we use of them the more we may lave to use. It is our soil that is sick. Over the years we have relentlessly been taking from it more than we could put back in those minerals that make for healthy, healthful crops. There are those who believe that a thoroughly natural, normal soil will produce crops needing no fungicides and iusecticides at all since they will not be attacked by insects and disease. All of us can at least go along with them in this hope, and certainly agree that the preservation and restoration of our soil is the first essential. Unfortnnately, restoration cannot be had with a snap of the fingers, and we inust fight ignorance, careless farmiug methods, and lack of fertilizers to really preserve what we have left. Soil building can he done organically with compost methods, but on a large scale this, at the writing, appears a slow, terribly laborious job-excellent though it be. Our commercial fertilizers are "the quick way," if we know the right fertilizers to use in the right amounts. Almost invariably we underfertilize or put on mixtures that are not best for the balauce of our soils. And, of course, we have had and still have a serious lack of nitrates.

Any measnres to immediately protect our crops are necessary ; therefore, the mse of fungicides and insecticides. Bat the basic long range battle remains to win back the fertility of our soil.

We are up acainst a vicious and apparently inevitable circle: a rapidly increasing world population (despite wars and famine), greater demands for more and more food from decreasing crop lands most of which become less fertile each year.

Here are some population and food statistics for the United States. The population in 1918 was $105.000,040$, in 1945, it was $145,000.000$ and it is not unreasonable to suppose that in 1960 we may see lom, 040,000 and ten million more in 1990.

Nutritionists estimate that it takes about three acres of land to provide each American with food and clothing to maintain an "averare" American standard of living. At the present time we have about 460.000 .000 acres of cropland, and that sounds like a lot, but in the next few year's a point may be reached where there are less than three acres of cropland for everyone. We believe farmers and scientists and manufacturers working together will lick the probleun, but in the meanwhile it leaves us with plenty to think about.
2. "Damping off," that old nightmare of the amateur gardener who tried to germinate flower and vegetable seeds in flats in a sunny window, has lost most of its terrors.

For several years now, a growing number of these gardeners have been avoiding all trouble with this plant killing fungus by germinating their secd in sphagnum moss. Most seed and supply dealers are now offering packages of dried sphagnum 110 oss as a seasonal suring staple. The U. S. Department of Agriculture has published a leaflet on splagnum moss obtainable from the Government I'rinting Office, Washington, at 5 cents, that gives details for using the moss.

The flat may be paeked solid with the shredded moss. If the supply of moss is scanty, the that may be filled with well-drained soil, leavlug spaee for about an inch of moss blanket on the surface.
3. 2,4-D Kills Celery's "Typhoid Mary." Keeping celery healthy with the aid of $2,4-1$ that is sprayed not on the celery but on another plant is a novelty in agricultural science reported by the Plant Disease Survey of the U. S. Department of Agriculture.

The $2, t-1$ would be deadly if sprayed on the celery. It is also deadly to a weed that acts as a "Typhoin Hary" of the celery fields in keeping alive an infection of the celery mosaic virus. The virus disease lives from season to season on the will day-flower, known botanically as Commelina longieaulis. This day-Hower is a common weed in the Florida mucklands where celery is an important crop, Aphids transfer the virus from the weed to the celery crop. The spray kills the weed, and the killing effect of the $2, t-1$ passes before the celery is set out.
4. "Dehydrofreezing." This is the name of a new process of fruit and vegetable preservation that has been developed in the Wrestern Regional Research Laboratory at Albany, California.

This new method, says the report, eolubines the advantages of dehydration with those of quick freezing. It carries the product through the first eyele of deliydration, which removes a considerable amount of the weighty moisture, and then freezes it. Vitamins and flavor are virtually undamaged; so the treated product not only retains the fresh quality, but in soue instances its original shape also.

This new method, the report says, seems to be better than either dehydration or freezing, partly because there is less destruetion of tissues by the larger ice crystals that tend to be formed when a greater amount of water is present. The clilef advantage of this proeess is a considerable saving in weight and bulk, which ju turn creates a saving all down the line, including packaging materials, storage spaee, and transportation facilities.
5. "Forecasting Crop Diseases." The regional program for forecasting the spread of eertain crop diseases, is getting under way. Threc field headquarters have been set up at whith L . S. Departinent of Agrieulture speeialists will cooperate with state plant pathologists in compiling reports of first appearances and prevalence of late blight of potatoes and tomatoes, blue mold of tobacco, and downy mildew of cucurbits, and in relating this occurrence of disease with weather and other environmental factors.

The Ames, lowa station will coordinate the mork for 11 North Central States.

The station at Raleigh, N. C., will eover the 13 southern States. At Newark, Delaware, the station will deal with the 13 Northeasteru States. All reports will be coordinated in the Division of Mycolog. and Discase Survey, Plant Industry Station, Beltsrille, Maryland.
6. "Gestation reriods of Five 1srecds of Cattle." It has been found at the West Virsiuia Lixperimental station gestation periods tor the Aberdeen Angas, Hereford, Jersey, Ayrshire, and Holstein cows averaged $280.5,285.2,277.9,277.8$, anil $2 \overline{5} .3$ days respectively. The three dairy breeds thus showed a slgniticantly shorter gestation period of 5.8 days than the beef breeds, the dairy breeds being the last three named.
7. "The Rest Period of Plants." Though little is known about what canses the rest period in many plants, says Dr. 11. L. Crane of the Burean of Plant Industry it is recognized as a necessary stage in their lives if they are to grow and contlnue reproduetive proeesses ycar after year. Iartieularly is this rest period necessary for trees and shrubs that shed their leaves in fall and survive freezing. The rest period is the time when the buds will not open and grow eren though temperature, moisture and other external conditions ale highly suitable for growth. Differont trees and shrubs like different people require rest periods of widely differing length. For instance, the usual rest period of the almond tree ls but two or three weeks, while the butternut commonly rests three or four months.

Among the facts learned about the breaking and beginning of the rest period Dr. Crane mentioned: Growth starts in spring as a result of the coming of warm wather and other favorable conditions. How soon rest starts depends on the ase as well as the lind of tree, on moisturc and nutrient supply. In some trees-the tung for example -the rest period is brought on by the arrival of short day-lengths. After the rest has become decp a certain amount of chilling temperature is needed to bring it to an eud so that buds can open and grow normally when warm weather comes.
8. "Isotopes And Farm Science." The Atomic Energy Commission is supplying "isotopes" for research by the U. S. Department ot Agriculture. From the Oak Ridge Plant, the atomic energy furnace (the pile) makes this possible. But what is an isotope? When atoms are bombarded with high-speed neutrous, an occasional nncleus of one of them absorbs a neutron. And theu an "isotope" of the original element, whether carbon, phosphorus, or iodine, is formed. The substauce remaius exactly the same chemically and biologically, but its weight is different. Many isotopes are quite stable, bnt others are very unstable, their nuclei spontancously throw ofi radiant energy similar to $\boldsymbol{X}$-rays, hence they are radio-active. Many isotopes exist in uature; numerous others have been made by scientista who may even produce more than one isotope of the same element. But nelltrons were hard to obtain until the Oak Ridge pile began to provide a constant source of these minute bullets, and isotopes were manufactured as a byproduct of the atom-bomb process.

The prices of these isotopes will range from $\$ 1.10$ to $\$ 50$ a unlt, as compared with a million dollars each. in some cases, before the war, and when available at all-for most of them could not then have been made at any price.

It is carbon isotope 14 which promises to solve the great basic agricultural mystery, that of photosynthesis, the process by means of which plants synthesize their food and store solar energy. Isotopic phosphorus 32 is likewise important to agriculture since it can be traced when used for plant fertilization, in order to tell just what the plant does witl it. Isotopes will also be very useful in medical and nutrition studies for, when introduced into animal bodies, their migrations can be recorded accurately by their energy emissions.
lt such an isotope is made to form a part of sugar, for instance, the sugar can be traced throughout the complicated action by which food energy is converted into muscular work. The nutrition of cattle and of crops can be studied far more intensively and intelligently with this new tool iu the arsenal of the farm research worker.
3. "Peas Need Quicker Harvest." Farm implement designers and agricultural engineers now have the job of developing a new type of machine for getting green peas out of the field and into the freezing plant faster than present equipment does it. This job is suggested by results of U. S. Department of Agriculture research into the causes of off flavor in frozen green peas. What is called for is a machine or combination of machines that will come as close as possible to matching what the lrousewife does when she gathers green peas in the garden, shells them and gets them to cooking with no lost motion or delay.

It will not be easy to improve on present vining equipment. A viner does a complicated job in the field and does it quickly. It cuts the vines, threshes out the pods, and finally shells the peas and bags them. It saves almost all hand labor. The investigation suggested the possibility that what was needed was a large capacity sheller for usc in the processing plant, with quick hauling of harvested pods to the sheller from which the freshly shelled peas could roll right fown a chute from the sheller to the blancher.
10. "Automatic Flight." On Scptember 20, 1947, the All Weather Flying Center's automatic C-itD aircraft left Clinton County Army Air Field, Wilmington, Ohio, for Stephenville, Newfoundland. From take-off point at Stephenville, Newfoundland, the automatic C-54D completed a fully automatic transatlantic crossing to Brize Norton, England. Brize Norton is approximately forty miles due west of London.

On October 7, 1947, the automatic C-54 dcparted Lyneham, England, for the return transatlantic crossing to Stephenville, Newfoundland. On October 8 the automatic C-5t departed Stephenville, Newfoundland, and arrived at its home base. Clinton County Army Air Field, Wilmington, Ohio. Distances flown on the automatic flights totaled approximately 7780 statute miles.

The automatic airplane flew the North Atlantic route on the transatlantic crossings and maintained a predetermined barometrlc altitude of 9000 ft . A fuel supply of approximatcly 3700 gallons on each crossing was carried.

One button on the control panel. a button marked "Brize Norton. England," was pushed. This was the only manual operation during the entire flight. The automatic flight was carried out ln twelve sequences by a self-contained electronics mechanism, the master sequence selector, without the aid of any human guidance.

Mechanical Engineering, Dec., 1947.


Rich, flavory, fresh White House Coffee vacuum packed in air-tight tins and jars, or buy it in the triple-sealed package for cconomy.

Send three (3) tin, jar, or package tops, or. 10-cents, for a pretty blue White House standard coffee measure.

## WHITE HOUSE COFFEE



## FRANCIS W. DAHL

Cartoonist and whimsical interpreter of the follies and fashions of New England past and present and particularly of that oddity known as a Bostonian.
Since 1930 DAHL-as his thousands of fans simply know him-has been turning out his daily cartoon for the BOSTON HERALD. (IIis work is now partly syndicated and regularly appears in such unBostonian places as Texas).

Writes Charles W. Morton in the Introduction to "Dahl's Boston": "The only time in my memory when Dahl really missed the Herald was ten or twelve years ago when, through no fault of his, the plate was damaged just before press time. In place of the drawing, the Herald carried a cryptic announcement to the effect that if the reader liked Dahl's work he should write a letter to the Herald. Coming upon this at my own desk in the Transcript, I was appalled. What horrid aonsense was the Merald contemplating?




"WE COME ALL THE WAY FROM KANSAS AND THE TIDE IS OUT."
DAHL
Cartoons on pages 76, 77, 78, 79-Courtesy The Boston Herald.

## ANSWERS TO OLD FASHIONED PUZZLES (See Page 51)

1. I mope, poem- 2. stars, tears- 3. alert, alter- 4. sabre, bears5. words, sword-6. suipe, pines- 7. horse, shore- 8. latent, talent.
2. 

$$
\begin{array}{llll}
\text { DON } & \text { TIP } & \text { DEW } & \text { TAP } \\
\text { NOD } & \text { PIT } & \text { WED } & \text { PAT }
\end{array}
$$

3. Chairs, china, chin.
4. LOVE.
5. Method: One-third of $\overline{5}$ is 17 ; so each must have 17 quarts. To measure 17 quarts fill the 7 quart measure twice and pour into some large vessel, making 14 quarts; then fill the 7 quart measure, draw off 4 quarts in the 4 quart measure, and then pour the remaining 3 quarts in the vessel containing the 14 quarts.
6. As in the margin.
7. A beautiful girl had a wen close to the very top part of her head. "But," she said, "it does not mar it much-at least not when I dou my net." When she saw her mother and lover draw near, she was glad the uet was a good fit; besides, as the gas was not lit, the moon was dim. Once, being startled out of a nap by thunder, she bumped the wen; but she went where there was a flow of cold water and held it under. "Spirt. water." said she, faint as a wounded deer; aud then she went for Ned. Ned was a negro doctor. He put ou tar, which was meet; but her ma was mad because it was not part water. However, it cured her, and now she may wear her net or not, as she pleases.

## ANSWERS TO WORD CHARADES (See Page 50)

1. St. Nicholas. 2. Cornice. 3. Arkwright. 4. Seasick. 5. Escape. 6. Welfare.
ANSWER TO CYPHER CONTEST (See Page 56-1948 edition). 951123456 equals Page 95,1 equals line 1,123456 equal the first six words on line 1, to wit; "We've launched our Post-War dream." The winners: E. B. Stewart, Long Island and Lyn Pearce, Portland, Maine tied for first; E. J. Jeffrey, USS Yosemite, third. Try your luck on this year's cypher contest on page 54 .

## Have you used - Tip-ans?

## HERE IS A PICTURE OF ONE OF THE HANDY DISPENSERS

Use them on letters, envelopes, packages you mail, books you loan, trademarks for your products, and many other things. They make a nice gift.

Tip-ons ore gummed, eosy to use, save time in writing your nome ond 'oddress.

CONVENIENT TO CARRY

## The Sangers P. O. Box 4 IF, Arlington Heights 75, Mass.



## ภ.

Make money. Know how to break and train horses. Write today for this book FREE, together with special offer of a course In Animal Breeding. If you are Interested in Gaiting and Riding the saddle horse, check here ( ) Do it loday-now.
BEERY SCHOOL OF HORSEMANSHIP
Dopt. 108-B
Pleasant Hili, Ohio


GRAYKO. Dept. 1469

## ILLUSTRATED COMIC B00KLETS

 THEKIND MENLIKE! (VEST POCKET SIZE) They are loaded with rare cartoons. Full of Fun and Humor. 20 DIFFERENT booklets sent prepaid for $\$ 1$ in plain sealed wrapper. No C.O.D.'s.Box 520,G.P.O., N.Y.C. 1

OM TMEDLDEST ESTABUSHED FIRM INTHE UNITED STATES SELLING EYZ GLASSESUBY MALE


Write Today for Free Catalog. Send No Money ADVANCE SPECTACLE COMPAMY 537 S. Dearborn St., Dept. OF-9, Chicago, III.

Perhaps the most singular curiosity in the book world is a volume that belongs to the family of the Prince de Ligne, and is now in France. It is entitled "The Passion of Christ," and is neither written nor printed. Every letter of the text is cut of a leaf; and being interleaved with the hlue paper is as casily read as the best print. The labor and patience bestowed in its completion must have been excessive, especially when the precision and mimuteness of the letters are considered. Rudolph 1I. of Germany offered for it, in $1640,11,000 \mathrm{du}$ cats, which was probably equal to 60,000 at this day. The most remarkable circumstance connected with this literary treasure is that it bears the royal arms of England, but when it was in that country and by whom owned has never been ascertained.

## LIFE SENTENCE

For the 2nd time in 157 years you can now buty for yourself or as a gift for 3 young, middle aged, or old friend, a life subscription to The Old Farmer's Amanac for Five Dollars by notifying YANKEE, Incorporated, Dublin, New Hampshire, U. S. A. that you wish same and enclosing your remittance with your request there being no deduction for those over 80 as Almanac readers have a way of living forever and we have no desire to get "stuck."

## THE

## OLD FARMER

 SALUTES A
## GREAT HERO-A

GREAT
AMERICAN-
"BABE" RUTH
WHO PASSED ON
AUGUST 17,

## \$--BELIEVE IN LUCK?--\$ <br> Carry a pair of GENU.

 INE BRAHMA RED LIVE HIGHLY MAG. NETIC LODESTONES! Legend reputes, Ocoult Oriental ancients super. stitiously carried two Live Lodestones as MOST POWERFUL MAGNETIC "LUCKY" CHARMS one to "attract" Good Luck in Money, Games, Lové, Business, Work, etc., the other to "prevent" Bad Luck, Losses, Evil. Trouble, Harm, etc. Believe in Luck? Carry a Pair of these curious Genuine Brahma Red Live Lodestones! We make no supermatural claims, \$1,97 Postpaid for the two, with all information, 28 c extra if C.O.D. Send $\$ 1.97$ and save 28c. Satisfaction GUARAN: TEED or Money Returned. Order yours NOWIASTROL CO., Dept. 11, Main P. O.
Box 72, BROOKLYN, N. Y. NOTICE! Beware of imitations! We absolutely GUARANTEE these Genuine Brahma Lodestones are ALIVE! We believe they are Just what you want, the REAL THING-POWERFUL DRAWING, EXTRA HIGHLY MAGNETIC! FUlly Guaranteed! Copyright $37 \cdot \mathrm{~A}$, CO.
A woman had four children; she named them Eenie, Meenie, Mini, and Wilbur because she didn't want any Mo!

Farmington (N.H.) News
 or Open Leg Sores, send away at once for FREE Booklet "THE LIEPE METHODS FOR HOME USE." Tells all about this 40 -year-old method, praised and endorsed by thousands. Liepe Methods, Dept. 400 3284 N. Green Bay Ave., Milw aukee, Wisconsin.


## POSTAL RATES.—DOMESTIC

New legislation is being proposed as we go to press, which may affect these rates.
First Class Matter may be forwarded from one Post Offce to anotber without additlonai postage, but otber matter must have new postage.

## LETTERS AND POSTAL CARDS.-FIRST CLASS.

Letters and Written and Sealed Matter, 3 cents for each ounce, local and noniocal, except that drop ietters are subject to 1 cent for each ounce when deposited for local delivery at offices not baving letter-carrier service, provided tbey are not coliected or dellvered by rurai or star-route carriers.
Post Cards and Prlvate Mailing Cards which comply with Departmental requirements.
Business Reply Cards or Letters, consuit Post $\Theta f f c e$.
NEWSPAPERS AND PERIODICALS.- SECOND CLASS.
Entire Newspapers or Magazines when malied by the public; for eacb two ounces or fraction, regardless of distance or weight.
Fourth class rate applies when it is fower tban second ciass.

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

Special Rates for Books. - Books (containing no advertising matter otber than incidental announcements of books) ali zones: 3 cents a pound pius 1 cent up to and including 16 pounds; 17 to 27 pounds, 3 cents a pound plus 2 cents; 28 to 38 pounds, 3 cents a pound plus 3 cents; 39 to 49 pounds, 3 cents a pound pius 4 cents: 50 to 61 pounds, 3 cents a pound pius 5 cents; 62 to 70 pounds, 3 cents a pound plus 6 cents.
Merchandise, incomplete coples of newspapers, printed and other mallable matter, each 2 ounces or fraction.
Books, catalogues malied in packages not exceeding 8 oz . In weigbt (must be of 24 or more pages and substantlaliy bound, with at least 22 pages printed, seeds, cuttings, buibs, roots, scions and plants, 2 ounces or fraction
Plaln Printed Cards containing no writing other tban the address, and not conforming with regulation size of Post Card, shali be considered Third Ciass and malied for.
Permit Mall. Enveiopes, foiders, etc., which are to be mailed under Third Class permit privileges should indicate the amount of postage paid.
Bulk Mallings. Applications for bulk malling privilege should be submitted to tbe Post Oftice.

## PARCEL POST. - FOURTH CLASS. <br> (For Zone consuit Post Offce)

Everything over 8 ounces, including books and printed matter, except First Class and newspapers and other periodicads entered as Second Ciass matter mailed by the publishers:-

Table of fourth-class or parcel-post rates


## 83

## HUDSON'S BAY

 "Paint" BLANKETS

Prized for their everlasting beauty and dyed-in-the-wool toughness Even before the United States existed, Hudson's Bay "Point" Blankets were famous for their "points." These distinctive lines were originally marks woven in the blankets to designate size. The blankets soon gained acceptance throughout the fur trading country as a standard medium of barter, each "point" being worth, in trade, one beaver skin. Today, "points" remind you that Hudson's Bay "Point" Blankets and garments are treasured for many points of quality . . . for lifetime toughness, all-wool, woven in beauty . . . deep, furry nap that shuts out bitter cold like a bear skin, sheds water like a duck's back.

## Hudson's Bay "Point" Blanket Garments for Men, Women and Cbildren . . .

Genuine utility garments . . . ideal for use wherever there is chill in the air. Everyone likes their bright, informal style. Handsome colors and almost unbelievable durability of 'Hudson's Bay "Point" Blanket garments have earned for them wide favor for hunting trips, winter sports, country use, as well as for school wear for children. Proud indeed is the boy or girl who owns a pair of these famous blankets or a coat made from one of them. Both blankets and garments can be identified as genuine by their Hudson's Bay woven label.

For information, write to:

# HUDSON'S BAY COMPANY, INC. 

 420 Lexington Ave.New York 17, New York

## He Runs For The Lord

## (Based on an article by Gene Farmer In Life Magazine)

Gilbert Dodds, mile-runner extraordinary, is just the sort of fellow who, if he had been on hand in 490 B.C. would have carried the news from Marathon to Athens. Stocky, iron-legged Dodds, usually known as the Flying Parson, has a special reason for running. He runs to win, always with a determination that seems inspired, yet he seeks no personal acclaim. Quite literally he runs for the Lord. He is an unordained lay preacher in the First Brethren Church, a Protestant denomination known as the Dunkards, and he lives at Eola, Illinois, with his wife Erma, son John 5, and daughter Jaun going on 3.

Dodds says he prays all the time, and you cannot doubt his sincerity when he assures you that he is running to serve evangelical ends. He once ran an exhibition mile at a Youth for Christ rally in Chicago at which he glorified the Lord for 70,000 people. If he signs his autograph for you, he will be almost certain to write below his signature a scriptural reference. For instance, "Phil. 4.13", which, incidentally, was nistaken by its recipient to mean that Dodds had run a 4.13 mile at one time in Philadelphia. The text, of course, is from Phillipians 4.13, and is typically a Dodds choice: "I can do all things through Christ which strengtheneth me."

Back in 1939 Dodds was a college sophomore and had shown so much promise as a runner that he was invited to enter the two mile race at the Millrose Games in Madison Square Garden, New York. He had never run indoors before, and early in the race-what with the unaccustomed boards and an atmosphere you could cut with a knifehe fell flat ou his face, exhausted. That was the first and last time Gil has let an audience down. In 1944, he had thought to hang up his spikes for good and put all his time to study and preaching. Duty, as Dodds saw it, called, and, not too silver-tongued, he took to the pulpit. But in 1947, atter considerable coaxing from his friends at Wheaton College, Chicago, where he was a graduate student in Christian education, he was persuaded to enter a race. Hesitantly he did, for at 28 he thought of himself as an old man compared to the competing youngsters. He won that race hands down and with his famous record breaking $4: 05.3$ indoor mile at the Millrose Games in January 1948, he had run his string of consecutive victories to 29. That $4: 05.3$ mile, incidentally, cxactly matched the fastest mile ever run on this continent (Gundar Haegg did $4: 05.3$ at the Harvard Stadium rs. Dodds back in '43). There is a pre-gun story about that race with Haegg that keys the character of both men. Dodds noticed that Haegg's lips were moving silently, and asked through an interpreter what he was saying. He was told that he was praying that both men might be allowed to do their best. Dodds looked at him in amazement for it was precisely what he himself was praying.

Many a runner, intense and nervous as Dodds, a worrier, has just fretted himself out of winning. But to Dodds the tendency to underrate himself and overrate his opponent, and which sends him to the starting mark in a dither of prayer and nerves, seems to be one of the things that lifts him ou to victory. But there are other things. His coach will tell you that he has a "great heart," and he has, in a double sense-in the sense that he is courageous, and in the strictly plysical sense. He has an astonishiug heart. At Harvard University's fatigue laboratory lie once submitted to a series of physical tests which proved that he had twice the powers of recuperation of the ordinary athlcte. Two minutes after runuing his rccord-breaking mile, he was breathing normally.

If Dodds' running were confined to sprint distances only, he would be the acme of mediocrity. He never has run the 100 yard dash in taster than $11: 3$ a time that would scarcely place in a schoolboy meet. This is odd, for his running, like the runuing of a sprinter, gives one the feeling that here is a tremendous driving force. It just isu't timed tor the shorter distances. He beats competition into the ground by the sheer, brutal, inexhaustible power of his running. A photo of the fiinish of the $4: 05.3$ mile shows that he liad almost lapped two of his opponents. In this amazing race he ran the first quarter in a pounding $58: 4$ seconds, passed the three quarter mark in 3:03.9 and ripped off the fastest last quarter of his career.

The American Olympic team sailed for London in July, 1948 without the Flying Parson. An injured tendon kept him out of the tryonts. But Olympics or not-his past performances must mark him as one of the truly great runners of all time. He runs for the Lord.

## Old Fashioned <br> Waterground - Whole Grain CORN MEALS \& FLOURS

Send todoy to YELLOW CREEK MILLS -Watergrinding since 1830 - for camplete price lists of these healthful and old style praducts.
YELLOW CREEK MILLS, RD2, Chardon, Ohio

> LET'S TRADE TIES

Send us 5 ties you're tired af. We'll mail you 5 HANDSOMELY cleaned DIFFERENT ties. Then pay mailman $\$ 1.00$ plus postage. Indicate your preference in color. We'll do our best to comply.
tie traders
Box 948, Providence, R. I.
Better Quality Ivory Informals for social brief notes. Name in delicate script type.

100 for $\$ 2.50$ postpaid at CONNIE'S
423 Chatham St. East Lynn, Mass.

## CHAIR CANE

Long selected Superfine, 82.90; Finefine, $\$ 3.00$; Fine, $\$ 3.25$; Medium, $\$ 3.75$; Cornmon, $\$ 4.25$ per hank. Fine woven cane webbing, $\$ 1.50$ square foot.
Flat oval reeds, $\$ 1.75$ per pound. All postpaid.

## GOCART SHOP

R-586 Pleasant St., New Bediord, Mass.

## OLD IEG TROUBIE

Easy to use Viscose Home Method heals many old leg sores caused by leg congestion, varicose veins, swollen legs and in. juries or no cost for trial if it lails to show results in 10 days. Describe the cause of your trouble and get a FREE BOOK
a.F. VISCOSE COMPANY



## ONE APPLICATION

## Makes False Teeth Fit

## For the life of Your Plates

If your plates are loose and slip or hurt, use this amazing, pllable, non-porous strip to refit them yourself, for instant andpermanent comfort. It's easy. Just lay the strip on your upper plate or lower plate, then bite and it molds perfectly. Hardens for lasting fit and comfort. Helps stop the embarrassment of slipping, rocking plates or the misery of sore gums. Eat anything and talk freely without fear your teeth will loosen. Ends forever the mess and bother of temporary applications that last only a few hours or months.

## EASY TO RE-FIT AND TIGHTEN FALSE TEETH

PLASTI-LINER is tasteless and odorless. Won't injure your plate. Guaranteed to give satisfaction or your money back. Removable as per directions. Users say: "Until I used Plasti-Liner I used several kinds of liners without success. Now I can eat anything."'H. H. M. "My plates are now better fitting than new." E. H. C.

## SEND NO MONEY

Just order a 82.25 package of PLASTILINER to rellne both upper and lower plates, or $\$ 1.25$ to reline one plate. Deposit money with your postman when he delivers. Or send the money now, and save C.O.D. charges. Generous sample of speclal plate cleaner supplied free.
PLASTI-LINER CO., 65B, Buffalo 15, N. Y.
FEEL.DLD? KNEES CREEK? DOINTS ACHIE?
Try Bradfords Rheumatic Tablets. Sold for years to satisfied customers. 75c Postpaid

## GORDON'S DRUGS

13 Clinton Ave., Cortland, N. Y.

## 1848-1948

For 100 years Wonderful Dream Brand Salve has been giving relief from discomforts associated with hemorrhoids and dry eczema. It is an inhibitory antiseptic dressing for minor burns, scalds, cuts, scrapes scratches and insect bites. $11 / 5$ oz. tin only 30 c .

At your druggist or send $30 c$ direct to
WONDERFUL DREAM SALVE CO.
14934 Harper Arenue, Delroit 24, Miehigan

| Welght <br> In Lbs. | Continued from Page 82 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Local | 1-2 | 3 | 4 | ZONES |  |  |  |
|  |  | Up to | 150 to | 300 to | 600 to | 1,000 to | 1,400 to | Over |
|  |  | $150$ | 300 | 600 | 1,000 | 1,400 | 1,800 | 1.800 |
|  |  | miles | miles | miles | miles | milies | miles | miles |
| 36 | \$0.26 | \$0.48 | \$0.81 | \$1.37 | \$2.03 | \$2.65 | \$3.39 | \$4.12 |
| 37 | . 26 | . 49 | . 83 | 1.40 | 2.08 | 2.72 | 3.48 | 4.23 |
| 38 | . 27 | . 50 | . 85 | 1.44 | 2.14 | 2.79 | 3.57 | 4.35 |
| 39 | . 27 | . 52 | . 49 | 1.47 | 2.19 | 2.86 | 3.67 | 4.46 |
| 40 | . 28 | . 53 | . 90 | 1.51 | 2.25 | 2.94 | 3.76 | 4.57 |
| 41 | . 28 | . 54 | . 92 | 1.55 | 2.30 | 3.01 | 3.85 | 4.69 |
| 42 | . 29 | . 56 | . 94 | 1.59 | 2.36 | 3.08 | 3.94 | 4.80 |
| 43 | . 29 | . 57 | . 96 | 1.62 | 2.41 | 3.15 | 4.04 | 4.91 |
| 44 | . 30 | . 58 | . 98 | 1.66 | 2.46 | 3.22 | 4.13 | 5.03 |
| 45 | . 30 | . 59 | 1.00 | 1.69 | 2.52 | 3.30 | 4.22 | 5.14 |
| 46 | . 31 | . 60 | 1.02 | 1.73 | 2.58 | 3.37 | 4.32 | 5.25 |
| 47 | . 31 | . 61 | 1.04 | 1.76 | 2.63 | 3.44 | 4.41 | 5.37 |
| 48 | . 32 | . 62 | 1.06 | 1.80 | 2.69 | 3.51 | 4.50 | 5.48 |
| 49 | . 32 | . 63 | 1.08 | 1.83 | 2.74 | 3.58 | 4.59 | 5.59 |
| 50 | . 33 | . 64 | 1.10 | 1.87 | 2.79 | 3.66 | 4.69 | 5.71 |
| 55 | . 35 | . 70 | 1.21 | 2.05 | 3.07 | 4.02 | 5.15 | 6.27 |
| 60 | . 38 | . 75 | 1.31 | 2.24 | 3.34 | 4.38 | 5.61 | 6.84 |
| 65 | . 40 | . 81 | 1.41 | 2.41 | 3.62 | 4.74 | 6.08 | 7.41 |
| 70 | . 43 | . 87 | 1.51 | 2.60 | 3.88 | 5.10 | 6.54 | 7.97 |

(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 the same as for the third zone.
(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 dellvery.
(c) Parcels weighing less than 10 pounds measuring over 84 lnehes, 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.
(d) For speeial rates on catalogs and other similar printed advertising matter, consult postmaster.
Limit of size for parcels is 100 inches in length and girth combined. Limit of weight is 70 pounds in all zones.
Library Books. - Books sent by authorlzed librarles to readers and when returned by sueh readers, for dellvery wlthln the first three zones or the State in which mailed: 4 cents for the first pound and 1 cent for each additional pound up to and including 47 pounds; 52 cents for 48 pounds and 1 cent for each additional pound up to and including 70 pounds.

SPECIAL HANDLING, (Fourth Class Matter Onlv.)
Pareels of 4 th Class Matter endorsed "Special Handling" will be given the most expeditlous treatment practicable (but not Special Dellvery) upon payment, in additlon to regular postage: Up to 2 lbs .10 c ; Over 2 to 10 lbs .15 c ; Over 10 lbs .20 c .


## Be Your Own MUSIC Teacher

## learn at home this money saving way

Simple as A-B-C. Your lessons consist of real sclectlons, instead of thesome exerclses. You read real notes-no "numbers"' or trick music. Some of our 850,000 stulents are band LEADE1as. Everything is in print and pictures. Flrst you are told what to do. Then a pleture shows you how boou you can play many popmar sougs. Mall coupon for our illustrited Free Book
and Prlnt and Pleture tample. Mention your favorlte fustrument. U.S. School of Music, 18512 Branswick Blda. N. Y. FREE
BOOKLET $10, \mathrm{~N} . \mathrm{Y} .50^{\circ} 1 \mathrm{H}$ ANN1VERSARY. $\qquad$ Y.
U. S. School of Music, 18512 l3runswick BIdg., N. Y. $10, \mathrm{~N} . \mathrm{Y}$.
Plasse send me Frec Booklet and Print aud Pleture Sample. I would like to play (Name Instrument).

Instrument . . . . . . . . . . . . . . . . . Instrument?
Nimme.
(Please Print)
Address

## SPECIAL DELIVERY

Up to 2 pounds Second. Third or First Class Fourth Class $13 c$

17 c
Over 2 pounds up to 10 pounds 20c
$25 c$
25 c
Over 10 pounds
25e 350
of the foregolng fee on second, third, or fourth ciass mail entities it to the most expeditious handling and transportation practleable. and also entltes it to special dellvery at the office of address.

## POSTAL NOTES

1c to $\$ 10 . . . . . . . . .$. . . Fee 5 c

## MONEY ORDER

From $\$ 10.01$ to $\$ 20$....... 13 From $\$ 20.01$ to $540 \ldots . .$. lrom \$40.01 to $560 . .$. . . . 18 From $\$ 60.01$ to $880 \ldots . . .20$ From $\$ 80.01$ to $\$ 100 \ldots . .22$

## ARMED FORCES

Three cents on ounce. regular, or live cents an ounce, air, care of U. S. Postmaster or Fleet Post Omfe at Ports of Embarkation.

Continued on Page ss

## SWING HAMMOCK and METAL STAND

## MANUFACTURERS value co. 561 medorild Ave., Bridy 18, M. Y. Dept. OFA. money refunded in 5 days. <br> 3050 : 1 mall owly Dintit mom Mayusactuata

This luxuriaus Swing Hammack and Metal Stand is on invitation to a blissful summer! Use it anywhere. No haaks, pasts or trees necessary. Use it an lawn, porch, seashore or bungolow. Take it with you everywhere - wherever the sun shines.
The ideal cambinatian! Racmy hammock and heavy gauge, strang metal stand halds any weight. Easily assembled. Breaks down to compact unit. Fits easily in cor. Selling in stores at over twice the price. you SAVE $50 \%$ BUYING DIRECT! MONEY BACK GUARANTEE! Send check or M.O. Sorry, No C.O.D. Complete satisfaction guaranteed of

more thon 195,000 children killed and injured in aupo accidents! Now you con protect your loved ones af negligible cost. Enjoy peoce of mind while driving ...

## NEW! SAFTYLOK INSIDE DOOR HANDLES

## SGOUP YOUR CAR, wITH inside door handies

Beoutifully Chrome Ploted Smorily Siyled . FITS ALL CARS


Sold by mail only direct from Mfr. MANUFACTURERS value co. 5s7. Miconold Ave., Oklyn. 18, Nr_ Y.

Enjoy the comfort and pleosure of a 4 door sedan withoul worrying obout the safety of your children in the back seat! SAFTYLOK exclusive sofely control handle is essentiol in protecting children ogoinst the hozards of rear doors flying open while cor is in motion.

## UNIQUE SAFTYLOK GIVES POSITIVE PROTECTION!

- SAFTYSOK HANOLES feoture o speciol locking device with key once locked they stay locked-doors open from outside onty! SAFTYLOK resists all tompering ond is guoranleed foolproof!
- SAFTYIOK is oltoched in a jiffy - all you need is a screwdriver Remove present inside rear door hondles and follow simple directions femove present inished. OUTSIOEOOR HANOLES ARE NOT TOUCHED.
- SAFTYIOK is occloimed and recommended by Underwriters, Brokers, Insurance Company Agencies and Safely Engineers for its accident prevention and life-protection value.
MONEY BACK GUARANTEE: for the soke of your children, don't delay! Send for o poir of SAFTYLOK inside your door handles rodoy
alloch them to the inside reor doors of your cor You must be com. pletely sotisfied, or return them within 5 doys and you money will be refunded in fulli MAll THIS HANDY COUPON TODAY!

| MANUFACTURERS value co (Dept.OFA) 557 McDonald Ave. <br> Bklyn 18. New York | Sarry-Na COD's <br> 1 enclase SB 95 Please rush parr of SAFTYLOK handles. |
| :---: | :---: |
| NAME |  |
| ADDRESS | Cor . ......................... |
| CITY ....................... STATE | Yeor .......... .. ............ |

## See also pages 82 and 86

## 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: Argentina, Bollvia, Brazil, Canada, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, Guatemaia, Haiti, Honduras (Republic), Labrador, Mexico, Newfoundland, Nicaragua, Panama, Paraguay, Peru, I'hilippines, Salvador, El; Spain and possessions; Uruguay, Venezuela.

Post Cards.-Single post cards for places enumeráted above 2 cents. Single post cards for all other foreign destinations 3 cents. Maximuin size $6 \times 41 / 4$ inches, minimum size $4 \times 23 / 4$ inches.
Printed Matter.- $11 / 2$ cents for each two ounces or fraction. Limit of weight: Inquire at Post Office.

Maximum dimensions.-Inquire at local Postoffice.

## INTERNATIONAL PARCEL POST.

Bccause of the varying rates and conditions, as well as frequent changes, applicable to foreign countries, it is important that a qualified postal employee handle parcel post transactions. Therefore, parcel post packages for foreign destinations must not be posted in a letter box; such packages should be taken to the main post office or to one of the larger classified stations and handed to a postal clerk.

## AIR MAIL: DOMESTIC AND FOREIGN

(All rates per one half ounce unless otherwise indicated. For Armed Forces

$$
\overline{\text { see preceding page.) }}
$$

$$
5 \notin \text { per oz.-in U.S.A. }
$$

A. $\overline{5}$ cents: (Per ounce) Canada, Mexico; Armed Forces or Civilian personnel with Army or Navy Postoffice addresses Continental United States, Alaska, Canal Zone, Canton Islands, Guam, Hawaii, Porto Rico, and U. S. Virgin Islands.
B. 8 cents: Cuba.
C. 10 cents: Central and South America, West Indies, British and Frenclı Guiana, British Honduras, Surinam, Bermuda and Newfoundland.
D. 15 cents: Great Britain, Europe and other Islands in waters around it, U.S.S.R., Vatican City, Algcria, Egypt, Iceland, Libya, Moroceo, Tunis, Turkey.
E. 25 cents: All other localities.

Weight limit is 4 lbs., 6 oz. cxccpt: Canada, Newfoundland and Labrador, 60 lbs .

## THE NEW POSTAL RATES

Pending official release of the new Fostal Rates Bill which takes effect December 31 , 1948 , the new rates will be tentatively without change fromi the preceding paragraplis except: Bulk, Brd Class pound rate-up $2 \phi$ per $1 b$. Airmail, up $1 \phi$; new airmail postal cards, $4 \phi$ each; regular 3 rl class where I.O. sorts, up $1 / 2$ f for each 2 oz.; booklets, small catalogs. Hyers, in bulk, up $2 \phi$ per Ib.; books, up ti on 1 st lb , and $1 \phi$ each added lb.; large catalogs, parcel post, special delivery, money orders, postal notes, c.o.d.'s all considerably increased; 3rd class bulk mail users will pay au annual \$10. fee.

## Consult Your Postmaster for Verification

## Do you suffer distress from



 With Its Nervous,
Highstrung Feelings?

Are you troubled by distress of female functional monthly disturbances? Does it make you feel so nervous, cranky, restless, weak, a bit moody-at such times? Then do try Lydia E. Pinkham's Vegetable Compound to relieve such symptoms! Women by the thousands have reported remarkable benefits.

Pinkham's Compound is what Doctors call a uterine sedative. It has a grand soothing effect on one of woman's most important organs. Taken regularly-Pinkham's Compound helps bulld up resistance against such distress. It's also a great stomachic tonic! All drugstores.

## Monthly Female Pains

Pinkham's Compound is very effective to relleve monthly cramps, headache, backache, -when due to female functional monthly disturbances.

## CLASSIFIED ADVERTISEMENTS

## BOOKS

6 B IBLE STUDIES', 70 Lessons on What the Bible teaches, only 25 c Complete. People's Christian Bulletin, Box 87 F , Cathedral Station, New York $25, \mathrm{~N}, \mathrm{Y}$.

$\mathrm{K}^{\mathrm{N}}$NOW THE TRUTH! Bible Correspondence Course. Free. Your questions answered. Voice of Prophecy, Inc. Box 55, Los Angeles 53, California. BOOKS - PRINTS - Autographs Bought and Sold. Edward Morrill and Son, 1252 Mass. Ave., Harvard Square, Cambridge, Parking Facilities, 8 minutes from Boston by subway.

BOOKS WANTED about Indians, outlaws, Civil War, birds, guns. State Histories, county histories, Texas Almanacs before 1880, atlases before 1850. Bound volumes of newspapers before 1870. Alabama Bookfinders. Birmingham, Alabama.
U.S.RARE COIN Value Guide, 50 c . Always a handy reference. Scott Stamp \& Coin Service, 25 Tremont St., Boston, Mass. Coins bought, sold.

## THE STORY OF CONNECTICUT - 500 pages, wealth of early and

 modern illustration, authentic, beautifully bound in blue and gold. Postpaid two dollars. Lewis S. Mills, 56 Broad St., East Hartford S, Conn.TIP READING for the Hard-of-Hearing. Bruhn Method approved by educators. Latest edition $\$ 3.00-\mathrm{M} . \mathrm{H}$. Leavis, Publisher, 386 Commonwealth Ave., Boston 15, Massachusetts.
PUZZLES. Intricately niade wooden puzzles. Fun for young and old. 40 varieties - 25 c for sample. 5 for $\$ 1.00$ - 12 for $\$ 2.00$. House of Kraft, 75 Bridge St., Salem, Mass.
TF YOU WRITE words for songs but 1 cannot write music we can help you. Details free. Write today. Five Star Music Masters, 405 Beacon Building, Boston, Mass.

## B USINESS OPPORTUNITIES

LOOK IIERE! Wanted - Men to start in business on our capital. Sell some 200 farin-hoine products. Thousands our dealers now make quick sales, big profits. For particulars write Rawleigh's, Dept. 1949 - 192-OFA, Freeport, Ill.
1949 EXCELLENT POULTRY profit yearl Demand greater, prices higher. Our Editors help you make more money. Mail $\$ 1.00$ twoyear trial subscription today! Poultry Tribune, Dept. 19, Mount Morris, Illinois.
R AISE FRYERS new easy way. monthly. Details Free. Fortune Fryer Farms, Box 150, Simi, California.

FTAIR DINKUM New inexpensive way to build up your stamp, coin collection. Details free. Scott Stamp \& Coin Service, 25 Tremont St., Boston, Mass.

## COLLECTORS

ANTIQUES boight and sold: old glass, china, bric-a-brac, will call anywhere in New England. Henry C. Barbour, Route 119, West Rindge, N. H. Phone Rindge 38.

WILL SELL 20 common or 7 fine arrowheads for \$1. Will buy gold coins for my collection. L. Crandall, Box 687, Idaho Falls, I daho.

FIREARMS WANTED: Antique and Modern. Also cap and ball revolvers for prompt cash. Send full description and price wanted. Kimball Arms Company, Woburn, Mass.
BROKEN JEWELRY wanted, all kinds. Highest price paid for jewelry, rings, spectacles, gold teeth, broken and usable watches, etc. Write for free shipping container, cash mailed promptly. W. H. Evans, 937 Tamalpais, San Rafael, California.

WANTED: Old letters written before postage stamps were used; also envelopes and letters bearing stamps mailed before 1870. Ernest S. Park, Wolfeboro, New Hampshire.

$\mathbf{R}^{\mathrm{E}}$ECORD COLLECTORS: Hear "Old Music Box Melodies," modern records of rare old music boxes, first time recorded. 4 albums available. Send for list and price. Bornand Music Box Record Co. 333 Fifth Ave., Pelhain, $65, \mathrm{~N} . \mathrm{Y}$.

$\mathbf{S}^{\mathrm{T}}$TAMPS \& COINS wanted. Enclose return postage with your inquiry. Valuable Coin Guide 75 c . Coin $\&$ Stamp Store, Rockford, 50, Ill.
WANTED ANTIQUE Firearms. U.S. Flintlocks. Colt and other cap and ball revolvers. Buy, sell, trade. Arthur Fortin, 22 Linden Avenue, North Andover, Mass.

## FOOD

OLD-FASIIIONED Mulled Cider; Hand-fashioned New England Stoneware, carly American designs; Unusual Gift Packages. Wholesale, retail. Frances Hall Perrins, Old Homestead Orchards, Westford, Mass.

$\mathbf{H}^{-}$
OORAY! Real Old-Fashioned Molasses Peppermint Drops and Horehound Squares. Get some from The Yankee Pedlar, New London, Conn. $\$ .75 \mathrm{lb}$. postpaid.

DAVID F LOONEY, Postoffice Drawer 13s, Somerville 43, Mass. Importer and Exporter, Manufacturer's Agent, Confectionery Broker, Fine English Teas.

$\mathrm{H}^{\circ}$OREHOUND CANDY. Genuine, pleasing, $1 / 4 \mathrm{lb} .50 \mathrm{c} ; 1 / 2 \mathrm{lb} .90 \mathrm{c} ; 1 \mathrm{lb}$. $\$ 1.25$, postpaid in U. S. Hardy Herbs, Lexington, Mass.

## MISCELLANEOUS

$\mathbf{H}^{\mathrm{E}}$ERE'S VALUE! Sharp, Surgical Steel, Double-edge Razor Blades, 100 only $\$ 1.00$ postpaid. Free sample. Daving Products, 96A Homestead Place, New Rochelle, New York.

WANTED by all dogs everywhere a home with children. You feed and care for us. We play with you and guard you.
THERE'S WEATIER News in the wind! Learn how to forecast the weather with the handy Weather Forecaster's Guide. Send a dime to the Cape Wind-Indicator, Harwichport 75, Cape Cod, Mass.

D
AISY CATTLE MARKERS, complete with chain, brass tag, for Horns and Neck. Write for folder. Golden Arrow Farms, Dept. I, Hunting ton, Indiana.

$\mathbf{M}^{0}$ONUMENTS. Service to all America. Old reliable company. 30,000 satisfied customers. Big 68 page catalog free. United States Marble \& Granite Co., Oneco, Dept A 70, Florida.

MUSIC BOXES, fine old instruments expertly repaired. All types bought and sold. Third generation in this business. A Bornand, 333 Fifth Ave., Pelham, 65, N. Y.
PETERBOROUGH PLAYERS Professional Summer Theatre, Stearns Farm, Peterborough, New Hampshire. July-August. Managing Director, Edith Bond Stearns. Founded 1933. All inquiries answered.

TOR SAFER DRIVING — Join Mileage League. For One Dollar, paid once, you get member's attractive, stream-lined Dash-Pledge Program, Signal Dots and Safe Driving Prescription for your Speedometer's face. Dr. George M. Stacy, Originator, 429 1st Nat: Bank Bldg., Peoria 2, I11

$\overline{\mathrm{O}}$RANGE COUNTY Country Properties, within 60 miles of New York City, from $\$ 3000$. up. Send for list. Paul'Boughton, Farm Broker, Warwick, New York.

## HOUSEHOLD \& PERSONAL

> IGHTNING ROD SYSTEMS. Protect now with Electra's Approved Lightning Protection. Electra Protection Co., Inc. Dept. FA, 11 No. Pearl St., Albany, 7, N. Y.

PURE WOOL Mittens. Men's hand knit mittens made from New England sheep's wool. \$2.50 pair. Dennings Woolen I'roducts, East Randolpl, Vermont.

$\Gamma_{\mathrm{S}}^{\mathrm{I}}$IIE DURWARD MADDOCKS Studio, 136 Wayland Ave., Cranston, $9, R$. I., will make oil paintings to order from photographs; they specialize in Fanily Homestead Oil Paintings.

R
EFINISHED NIGITT tables Pine $\$ 17.00$ crated, Refinished line Chests, $\$ 27.00$ crated. Dry Sinks, $\$ 15.00$ crated. Blanket chests, Empire, Victorian, Furniture, Glass, China, lamps. $\$ 25.00$ Special lots of Glass or China. Toms Antiques, 37 Dunstable Road, North Chelmsford, Mass.

## H

OOKED RUGS have charm! Visit "Rose Cottage," home of beautiful designs and supplies. Monday through Friday, 2-5 P.MI. Free Literature. Pearl K. McGown, West Boylston, Mass.
FOR BIG MEN ONLY - Quality shoes sizes 10 to 16. Widths AA-EEE. Dress, work shoes, loafers, wing tips, moccasins, hitops, sox. Guaranteed. Write for Free Catalog. Kingsize, 616 Brockton, Mass.
GIFT-A-MONTH - for anniversary, birthday or hostess presents. $\$ 10$. for 12 months or $\$ 6$. for six. Add one dollar outside New England, Describe recipient's hobbies, preferences, etc. Pee Wee Gift Shop, 126 Chestnut St., New Bedford, Mass.

## F <br> TREE CATALOG: Useful gifts, <br> essentials, toys, to make or purchase.

 Craftsman's Books. Novelkraft, 3115 N. Sixteenth St., Philadelphia 32, Pa.
## M

 EXICAN PRODUCTS Co., 126 N. Main, Tulsa 3, Okla. Imported Novelties, Drawn Work, Feather bird pictures, Sombreros, Jumping Beans, etc. Bulletin free.$\mathrm{O}^{\mathrm{F}}$REGON wood saniples on cardboard, 25 c : or miniature shingles, $35 c$ bundle, postpaid. Myrtlewood novelties for gift shops. T. Binford, Oceanlake, Oregon.

## $G$

 REETING CARDS - Christmas, Gwith and without scripture verse; also Easter and Luerydays to retail for 5 c and 10 c . Write for samples. M. A. HAVEN COMPANY, 551 Boylston Street, Boston, Mass.
## THE WORLD'S FINEST LOW-PRICED RINGS



MEN! \$4.95 Massive, Gold Filled. with three big flashing Imitation Diamonds!


[^1]
## GLOSSARY OF ASTRONOMICAL TERMS, ETC.

abol. . . . abolished
Aet, ... age
An. Ecl. . . . see Eclipse, Annular.
Aph. - Aphellon... Planet revolving about Sun reaches point in its orbit farthest away from the Sun.
Apo. - Apogee. . . Moon reaches point in its orbit farthest from Earth.
Appulse . . . if during eclipse Moon passes only through the penumbra.
b. - born.

Aspect . . . description of the relative position of two or more bodies in the solar system. These are described by signs, etc., on the calendar pages thus $0 \delta 4$, etc. By consulting the meaning of the signs and aspects on page 4, you will arrive at the meaning for the "sign language" used on pages 15-37, viz., Conjunction ( $\delta$ ) of Mars ( $\delta^{\circ}$ ) and the Jupiter ( 4 ) occurs on this day. (See par. 2, page 4.)
Conj. - conjunction . . . moment of closest approach to each other of any two heavenly bodies.
conscr. ... consecrated.
d. . . . died.
deciination (see top left hand calendar pages) . . measure of angular distance any celestial object lies perpendicularly north or south of celestial equator. Exactly analagous to terrestrial latitude. OFA gives declination at tine each day the Sun is due South.
Dominicai Letter.. used in reckoning civil calendars.
Eclipse . . . conjunction or opposition of sun and moon occurs with moon at or near a node.
Eclipse, annuiar . . . when sunlight shows around the Moon during the eclipse.
Eclipse, lunar . . opposition of Sun and Moon with moon at or near node.
Eclipse, solar . . . conjunction of Sun and Moon with Moon at or near node.
Ecliptlc . . . that circle in which the plane of the orbit of the Earth about the Sun would if extended cut the celestial sphere - or the apparent path of the Sun in the sky in a year due to the Earth's revolution about the Sun each year.
E1. - eiongation . . . apparent angular distance of a member of the solar system from the Sun as seen from the Earth.
Epact . . . used in reckoning ecclesiastical calendars, age of calendar moon Jan 1.
Eq. . . equator.
Equinox, autumnal . . . Sun passes from northern to southern hemisphere. Fall.
Equinox, vernai . . . sun passes from southern to northern hemisphere. Spring.
E.S.T. . Eastern Standard Time.

Feasts and Fasts . . . In the religious calendars, many "observable" days change each year with the date Easter falls on. The OFA endeavors to list the important Protestant, Catholic, and Jewish observances.
fd. . $\quad$ founded.
Full Sea (Morn and Eve) . . . the time the tide is high in the morning and in the evening at Commonwealth Pier, Boston. A correction table in the OFA also adjusts this time for other places. (See page 7.)
Gr. El. . . . greatest elongation.
Geocentric . . measure of celestial longitude and latitude when observer is at center of the Earth.
Golden Number . . . used in reckoning civil calendars.
Heiiocentric . . . measure of celestial longitude and latitude when observer is at center of the Sun.
Inf. - Inferior... Inferior conjunction is when the Planet is between the Sun and the Earth.
Julian Period . . First year was 4713 B.C. Its length is 7980 years.
k. . . . killed.

Key ... columns of letters marked thus refer to correction table on page 12 so that the times given may be adjusted to localities other than Boston.
Lat. - latitude.
Moon's Age... average time elapsing between new moons (max. 291/2 days). Calculated when Moon is due South.
(D) First Quarter . . . moon in quadrature East or one half of the side of the moon toward the carth is illuminated.
(O) Full Moon . . . moon reaches opposition.
(d) Last Quarter . . . moon in quadrature West.
-) New Moon. . . Sun and Moon in conjunction.
Moon's phases . . . Aspects of Moon and Sun.
Moon's Piace . . . Moon's position in the Zodiac when due South or which "sign" it is in. See page $4-$ par. 3.
Moon Rlse and Set. . . as used in the OFA apply only to risings and settings between sunset and sunrise.. or during the night.
Moon Runs High or Low . . . day of month Moon Souths highest or lowest above the horizon.
Moon Souths . . . Moon exactly above South point of observer's horizon.
Node . . . when a Planet or Moon in its motion crosses the ecliptio.

Node, Ascending . . . Planet or Moon crasses ecliptic from South to North.
Node, Descending . . . Planet or Moon crosses ecliptic from North to South.
Occultations . . eclipses of Stars by the Moon.
Opposition ... time when Sun, and Moon or Planet appear on opposite sides of the sky (elongation 180 degrees).
O.S. - Old Style ... was when calendar was eleven days "out of whack." In September, 1752 , the 3rd was reckoned as the 14 th, to make present calendar.
Penumbra...concentric area of partial shadow around the unbra.
Peri. - Perigee. . . Moon reaches point in its orbit closest to Earth.
Peri. - Perihelion . . . Planet revolving about the Sun reaches point in its orbit closest to Sun.
Quadrature . . . Moon or Planet lies a quarter turn of the sky from the Sun.
R.A. - Rigint Ascension... the measure Eastward along the celestial equator of any celestial body from the vernal equinox to the point where the circle which passes through the object perpendicular to the celestial equator intersects the latter.
Rain . . . drops large enough to splatter on the old man's bald head.
Rej. - rejects.
Roman Indiction . . . used in reckoning ecclesiastical calendars.
Seasons . . . boundary points are the two solstices and two equinoxes.
Snow... When a cat's tracks are visible on the barn roof.
Solar Cycle . . . used in reckoning civil calendars.
Solstice, Summer . . . point at which the Sun is farthest north of the celestial equator, passing overhead on the Tropic of Cancer. Beginning of Summer.
Solstice, Winter... limit of Sun's journey south of the celestial equator, passing overhead on the Tropic of Capricorn. Beginning of Winter.
Star, Evening . . . above horizon at Sunset.
Star, Morning . . . above horizon at Sunrise.
Stat. - stationary ... when the apparent movement of a Planet against the background of Stars stops - just before same comes to opposition.
Sunrise and Sunset . . . visible rising and setting of Sun's upper limb across the unobstructed horizon of an observer whose eyes are 15 feet above ground level.
Sun Fast . . . the times given in this column must be subtracted from your Sun Dial to arrive at the correct time.
Sup. - Superior... Superior Conjunction is when the Sun is between the Planet and the Earth.
Tides, heights of ... at Commonwealth Pier, Boston. See correction table on page 7 for adjustments for other places.
Twilight . . . begins or ends when stars of the sixth magnitude disappear or appear at the Zenith - or the Sun is appr. 18 degrees below the horizon.
Umbra... deep shadow through which the Moon passes during eolipse.
Underground Moor... one which changes ita fh ses between 12 M . and $1 \mathrm{~A} . \mathrm{M}$.
Weather Indications... in italics on the right hand calendar pages indicate the weather over, as a rule, three or four days time as shown by the spread of the words down the page.
w. . . with.

Zenith . . . point in heavens directly over observer's head.
Zodiac... sixteen degree sky road outside of which moon and planeta never wander. It is divided into twelve equal divisions called the Signs of the Zodiac, and forms much of the basis of some astrology - and superstition. See page 4 - par. 3.

## LENGTH OF TWILIGHT

Subtract from time of sunrise for dawn.
Add to time of sunset for dark.

| Latitude | $\begin{gathered} 25^{\circ} \mathrm{N} \\ \text { to } \\ 30^{\circ} \mathrm{N} \end{gathered}$ | $\begin{gathered} 31^{\circ} \mathrm{N} \\ \text { to } \\ 36^{\circ} \mathrm{N} \end{gathered}$ | $\begin{gathered} 37^{\circ} \mathrm{N} \\ \text { to } \\ 42^{\circ} \mathrm{N} \end{gathered}$ | $\begin{gathered} 43^{\circ} \mathrm{N} \\ \text { to } \\ 47^{\circ} \mathrm{N} \end{gathered}$ | $\begin{gathered} 48^{\circ} \mathrm{N} \\ \text { to } \\ 49^{\circ} \mathrm{N} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | h m | h m | h m | h m | h m |
| Jan. 1 to Apr. 11 | 120 | 126 | 133 | 142 | 150 |
| Apr. 11 to May 3 | 123 | 128 | $\begin{array}{ll}1 & 39\end{array}$ | 151 | 204 |
| May 3 to May 15 | 126 | 134 | 147 | 202 | 222 |
| May 15 to May 26 | 129 | 138 | 152 | 213 | 242 |
| May 26 to July 23 | 132 | 143 1 | 159 | 2 2 2 13 |  |
| July 23 to Aug. 4 | $\begin{array}{ll}1 & 29 \\ 1 & 26\end{array}$ | 138 134 | 152 1 1 | $\begin{array}{ll}2 & 13 \\ 2 & 02\end{array}$ | 242 222 |
| Aug. 4 to Aug. 15 | 1 1 1 1 26 | 1 1 1 1 28 | 1 1 1 | 151 | 204 20 |
| Aug. 15 to Sept. 6 | 1 26 <br> 1 20 | 1 1 1 26 | 1 1 1 39 | 142 | 150 |

## INDEX

ThE OLD FARMER's ALMANAC(K) contains a wealth of information. Those who do not understand the signs, symbols, references, etc., are urged to consult pages 4, 7, 10-1, , 92, 93 .


## GOYETTE MUSEUM OF AMERICANA PETERBOROUGH in the Monadnock Region NEW HAMPSHIRE

Antique Automobiles Stage Coaches : : Weave Shop : : : Covered Wagon: : : Apothecary Shop : : EarlyNew England Shops Barber Shop : : : Old Time Fire Station : Village Store : : : Cobbler's Shop : : China and Glass Shop : Harness Maker's Shop : Cabinet Maker's Shop Ironmaster's Shop : : Two Toy Shops : : : Dressmaker's Parlor : Gun Shop : : : :


Our huge construction program is in full sway (as you probably realize if you've been in the vicinity of Jordan's recently). Steam shovels, cranes, derricks, drilling machines have torn down our old building . . . preparatory to fulfilling our dream of "Building for Boston and New England the One Store of Its Kind in All The World." As the wonders of this building unfold we shall adhere to the standards which have guided us through 97 -years as friend, neighbor, citizen, merchant to all of New England.

## Conconmin ancircop Eonts The Ideal Boots for Outdoor Use

For hunting, fishìng, hiking, working, gardening or farming, you couldn't ask for more rugged, more comfortable footwear than these Corcoran Paratroop Boots. Made to the specifications of the famous Paratroop Jump Boots . . . with the addition of a heavy oil finish . . . these soft pliable boots have all the features that insured Paratroopers foot comfort and foot protection under


## CORCORAN INC., STOUGHTON, MASS.

Please rush a pair of Paratroop Hunting Boots. Check $\square$ Money Order $\square$ for $\$ 11.87$ is enclosed. I will pay postage C.O.D.

## Name

Address
Regular shoe size and width


Send for Valuable
Free Booklet

## "ARM \& HAMMER"

 and "COW BRAND" bAKING SODASBoth are U.S.P. Bicarbonate of Soda, classified as official remedies by the Council on Pharmacy and Chemistry of the American Medical Association.

- Both are acceptable as dentifrices by the Council on Dental Therapeutics of the American Dental Association.
- For generations, of course, they have been recognized as essential aids to good cookery.

Keep a package in the medicine cabinet as well as in the kitchen. CHURCH \& DWIGHT CO., Inc. 10 Cedar St., New York 5, N. Y.

Business Established in 1846

## ARM \& HAMMER WASHING SODA OR SAL SODA

 is completely soluble in water and is very effective in cleaning operations. Total solubility also prevents its clogging of drains, traps, etc.
## To clean with ease use





$$
\begin{aligned}
& \text { AY } 81 \text {. F306 } 1949 \\
& \text { Old farmer's almanac }
\end{aligned}
$$

$$
913030
$$


[^0]:    'Applies to nonresidents. The term "reciprocal" means that the state will extend to a nonresident the identical privileges granted by his home state to nonresident motorists. In some states visitors must register within a specified time. In most states persons who intend to reside permanently must buy new plates and secure new driving license at once, or within a limited period. Acquisition of employment or placing children in public school is often considered intention to reside permanently.

    2 None on used cars.
    ${ }^{3}$ Until expiration of home registration.
    4Three months before current registration expires.
    ${ }^{6}$ Use tax on new cars, frst registration of used cars..
    ${ }^{6}$ Bill of sale must be filed.
    7Excise tax.
    sPermit showing compliance with state compulsory liability insurance law must be obtained after 30 days.
    ${ }^{9}$ State has compulsory insurance.
    11815 maximum.
    ${ }^{12}$ Registry tax on first registration in state.
    ${ }^{13}$ No sales tax on autos.
    *South Dakota does not require. All other states do.

[^1]:    CHARM JEWELRY CO., Dept. 52, 294 Washington Street, Boston, Mass.

