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PAINTER'S FLORIDA *and* CUBAN ALMANAC 1909

This Almanac has been compiled for the purpose of giving the farmers, fruit growers, and in fact all the people of Florida and Cuba, a ready reference guide, containing such information as is usually found in an almanac, together with many tables and articles of special interest to our friends in Florida and Cuba.

A few pages in the publication are intended to serve as a reminder of our famous line of fertilizers, fertilizing materials, and other items of value and interest to our people.

We will take pleasure in sending copies of this almanac to your friends if you will forward us their addresses.

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JACKSONVILLE, FLA.

Tide Table.

The tidal differences applied according to sign to the time of high water at Key West will give high water at the station. For Florida the resulting time is that of the 90th meridian, and for Cuba the results are in 75th meridian time.

Florida.					
			Puntarasa, San Carlos B.....	add. 3	00
			Punta Gorda, Char. Har.....	add. 5	06
Fernandina	sub. 1	21	Tampa	add. 4	28
Mosquito Inlet	sub. 1	28	Cedar Keys.....	add. 3	52
Mayport, St. Johns River.....	sub. 1	43	St. Marks Light.....	add. 4	44
Hopkins, St. Johns River.....	sub. 1	19	Apalachicola	add. 1	18
Jacksonville, St. Johns River.....	sub. 0	28	Pensacola	add. 0	53
Mandarin, St. Johns River.....	add. 1	00			
Tocoi, St. Johns River.....	add. 3	44	Cuba.		
Palatka, St. Johns River.....	add. 5	22			
St. Augustine.....	sub. 1	01	Cape San Antonio.....	add. 0	23
Sea Breeze.....	sub. 1	28	Bahia Honda	add. 0	10
Cape Canaveral.....	sub. 1	25	Havana	0	00
Indian River Inlet.....	sub. 1	56	Mantanzas	add. 0	10
Jupiter Inlet Light.....	sub. 1	27	Cardenas	add. 1	03
Hillsboro Inlet.....	sub. 1	07	Nuevitas	add. 14	01
Miami, Key Biscayne Bay.....	add. 0	04	Port Gibara.....	add. 11	30
Cape Florida, Biscayne Bay.....	sub. 1	02	Port Nope Entrance	add. 11	34
Carysport Reef Light.....	sub. 1	05	Port Tanama.....	add. 11	29
Sombero Key Light.....	sub. 0	59	Cape Maisi.....	add. 11	14
Sand Key Light.....	sub. 0	39	Guantanamo Bay Ent.....	add. 12	25
Northwest Passage Light.....	add. 2	00	Santiago Bay Entr.....	add. 12	49
Tortugas Harbor Light.....	add. 0	29	Manzanillo	sub. 10	04
Cape Romano.....	add. 3	20	Cienfuegos	sub. 0	39

The constant, 6 hours used as the interval between successive tides, is near enough for all practical purposes, as the direction and force of the wind causes constant changes.

Explanation.—Suppose it is desired to obtain the time of high and low tides for Fernandina, January 1—

High water calendar page	4:54 a. m.
Subtract	1:21
High water Fernandina	3:33 a. m.
Add	6:00
Low water	9:33 a. m.
Add	6:00
	15:33
Less	12:00
2d High Water	3:33 p. m.

Astronomical Calculations.

By *Berlin H. Wright, DeLand, Fla.*

Eras of Time.

The Gregorian Year 1909 corresponds to the following eras:

From July 4th, the 134th Year of the Independence of the United States.

The Year 1327 (nearly) of the Mohammedan era of the Hegira, beginning January 23.

The Year 8018 of the Greek Church, beginning January 14 (Old Style).

The Year 4606 (nearly) of the Chinese era beginning January 22.

The Year 5669-70 (nearly) of the Jewish era, Yr. 5670 beginning at sunset September 15 (see calendar).

The Year 2669 (nearly) of the Japanese era beginning January 22.

The Year 6622 of the Julian Period.

The Year 2221 of the Grecian era.

January 1, 1909 is the 2,418,308th day since the commencement of the Julian Period.

Chronological Cycles.

Dominical Letters	C	Solar Cycle	14
Epact (Moonis Age January 1)	8	Roman Indiction	7
Lunar Cycle or Golden Number	10	Julian Period	6622
Dionysian Period	238	Jewish Lunar Cycle	7

Explanatory Note.—The Dominical Letter or Letters (two for Leap Years) or Sunday Letters, indicates the day of the year on which the first Sunday occurs. The first seven letters of the alphabet being used. Thus for 1909 the Dominical Letter is C, the third letter of the alphabet and hence the third day of the year will be the first Sunday of the year. In Leap Years two letters are used, the first being for January and February and the latter being the preceding letter answers for the last 10 months in order to maintain the cycle.* The Golden Number is that number of a cycle of 19 years which shows how many years have passed since New Moon fell on January 1; for in nearly 19 years the Solar and Lunar years nearly come together. The chief use of this cycle is in fixing the date of Easter, and in this same connection is used the Epact. The Solar Cycle is the number of years that have elapsed since the days of the week fell on the same days of the year, or when there will be, therefore, a recurrence of the Dominical or Sunday letter. This would be the case every seven years but for Leap Year, hence four times seven is the cycle, or 28 years. It is the remainder found by adding 9 to the year and dividing the sum by 28. The Roman Indiction is a cycle of 15 years and is of no utility except to chronologers. It is the remainder found by adding 3 to the year and dividing by 15. The Julian Period is a cycle of 7980 years, and is the product of the three cycles. Golden Number (19), Solar Cycle (28) and Roman Indiction (15), and hence shows the

*The rule for computing the Dominical Letter for any year is somewhat complicated, and for that reason is omitted here.

time when these three cycles will coincide or begin at the same time. The first of this cycles will be completed in the year 2267. It is the year -|-4713. The Dionysian Period is a cycle of 532 years and is also called the Great Paschal Cycle, being the product of a complete Solar and Lunar Cycle (28×19). It is the remainder found by adding 457 to the year and dividing by 532 and, with the Julian Period, is chiefly used by chronologers. The Jewish Lunar Cycle is always three less than the Golden Number and is used by the Jews in fixing the time of their festivals.

Eclipses, 1909.

There will be four Eclipses in 1909, two of the Sun and two of the Moon, as follows:

I—Total of the Moon June 3, the Moon rising more or less eclipsed. Visible as follows:

Fig. I

Phase.	Eastern Standard	Central Standard
	Time (Cuba and Porto Rico)	Time (Florida)
	H. M.	H. M.
Partial Eclipse begins at a	Before Sunset and before Moonrise.	
Total Eclipse begins	7:58 p. m.	6:58 p. m.
Middle of Eclipse at c	8:29 p. m.	7:29 p. m.
Total Eclipse ends	9: 0 p. m.	8: 0 p. m.
Partial Eclipse ends at b	10:14 p. m.	9:14 p. m.

The size of this Eclipse is 14 digits, the Moon's apparent diameter being taken as 12 digits, hence it is 2 digits *more than total*. This is illustrated in the upper portion of Fig I, where the arrow shows the course of the Moon from W to E through the great black shadow which the earth throws into space, but which is invisible to us, its presence being made manifest to us when the Moon plunges into it and suffers an eclipse thereby.

II—Central of the Sun June 17. Invisible in Cuba and Peninsular Florida south of a line from near Cedar Keys to Fernandina. Throughout Florida, westward from this line, the Sun will set more or less eclipsed, being very small, about one digit, in the vicinity of Tallahassee and nearly two digits in extreme West Florida.

See Fig. II, where the Sun is shown with one, two, three and four digits cut out of its northern part or limb. This eclipse will be visible throughout a good share of North America and Asia and its eastern boundary line cuts across Florida as stated above.

Fig.-II

III—Total of the Moon November 27, visible throughout North and South America and the West Indies. See Fig. 1, lower portion. This eclipse, like eclipse I, is more than total, being 16 digits or two greater than the first, as shown in the figure on page 4. The following is the time of the different phases:

Phase.	Eastern Standard Time (Cuba and Porto Rico)	Central Standard Time (Florida)
	H. M.	H. M.
Partial Eclipse begins at a	2:11 a. m.	1:11 a. m.
Total Eclipse begins	3:14 a. m.	2:14 a. m.
Middle or Greatest Eclipse at c	3:55 a. m.	2:55 a. m.
Total Eclipse ends	4:36 a. m.	3:36 a. m.
Partial Eclipse ends at b	5:38 a. m.	4:38 a. m.

As shown in the figure, the Moon will first touch the earth's umbra or black shadow at a point 58° from the northern point to the east or at a. Then continuing on eastward and northerly she emerges after 3 h. 28 m., the last contact being at b 91° from the northern point of the Moon toward the west. The earth's conical shadow is about 1,000,000 miles in length and its diameter, at the point where the Moon passes through it, about 6,000 miles.

IV—Partial of the Sun December 12, invisible in America.

Great Comet Due in 1909-10.

Halley's Comet, by some supposed to be the Star of Bethlehem, will again visit us this year. It will be visible to the naked eye in October about midway between the Pleiades and Hyades on the west and Castor and Pollux in Gemini on the east or about 7° to the right or west of the bright Star Alhena in Gemini. See Chart of the Heavens. Its period is about 75 years and it has been observed at these intervals since the 15th century. Records show its probable return many centuries earlier. It last visited us in 1835 when its tail was about 20° long and its nucleus like the Red Star Antares.

B. H. WRIGHT.

The Planets. (See also the table of rising, setting and meridian passage of the Planets; and Chart of the Heavens.)

THE PLANETS.

(See also the table of rising, setting and meridian passage of the Planets and chart of the Heavens.)

Mercury Will be Brightest—

(1) As a Morning Star, west of the Sun, March 3—8 and October 25—31 rising about 1 h. 15 m. before the Sun, being farthest west of the sun March 9 (27°) and October 28 (18°).

(2) As an Evening Star, east of the Sun, April 27—May 3, and September 20—26, setting about 1 h. 15 m. after the Sun, being farthest east of the Sun May 20 (22°) and September 17 (27°).

Look for a very red star within the above named intervals near the sunrise or sunset points at or near the time of beginning or end of twilight and a little up from the horizon. It is quite an event to observe this planet and be certain of it.

Venus, the "Love Star" or planet, will not attain her greatest possible degree of brilliancy this year, but will be brightest of the year at its close. (See table of the Planets.) She will be a Morning Star until April 28 and an Evening Star after that date. Venus will be at superior conjunction with the Sun April 28, or on that date she will rise and set with the Sun, being on the farther side of the Sun from the Earth or, in other words, the Sun will be between us and the planet. Before that date she will be visible west of the Sun and afterwards east of him. In the course of her orbit about the Sun she presents to us all the phases of the Moon as shown in the annexed figure. These phases may be observed very nicely by the aid of a small telescope or good field glass.

A.—Fifteen days before superior conjunction or April 13, 1909.

B.—At greatest elongation West, April 23, 1910.

C.—When brightest as a morning star March 18-19, 1910.

D.—Just after inferior conjunction or February 12, 1910.

E.—Fifteen days after superior conjunction, May 13, 1909.

F.—At greatest elongation East, December 2, 1909.

G.—When brightest as an evening star, January 7, 1910.

H.—Just before inferior conjunction, February 5, 1910.

The great difference in the apparent size or diameter of the Venus in A and E as compared with D and H is because of the vastly greater distance she is from us at her superior conjunction. When seen as a crescent as D or H she will be nearer to us by nearly the diameter of the earth's orbit than when appearing as A or E. When she appears like D or H she will be only about 25,000,000 miles from us and when like A or E she will be 160,000,000 miles distant or about six times as far. Her apparent diameter actually increases about six fold under these changed conditions.

At the beginning of the year Venus will be in the constellation scorpio (♏) a few degrees north-east of the bright red star Antares (see Chart of the Heavens). She is advancing or moving eastward past the stars and on January 20 she will be close to and above the Milk Maid's Dipper in ♏ and on the 30th of January only as 21' north of Uranus. On February 19 and again on April 19 she will be in conjunction with ♄ being at the first ♄ 40° north of him in ♏ and 22' south on the last ♄. In March she passes through ♏ and enters ♏. During April she passes through ♏ and enters ♏, being just south of the bright stars in the head of Ram, when last visible before her conjunction with the Sun on April 28. On April 9 she will be 10° N. of ♏. On May 12 she will be about 50° below (s) of the Pleiades or 7 stars, and on May 22 close to the Hyades and only 50° north of the brilliant Aldebaran and will present a beautiful sight in the evening skies. On June 1st she will be about midway between Capella and

the Stars of the Orion's Belt. She enters Π June 10 and by the 25th will be flirting with Castor and Pollux a few degrees below or south of them towards the brilliant Procyon. July 4 she enters Σ and on the 10th is close to the cluster of dim stars called Praesepe. On July 26 she will be just below Regulus. in the sickle in Ω . August 12 only 12' south of 2ζ . September 10 she will be 20° north of Spica Virginis in $\mathfrak{M}$ and on October 18 she completes her orbit and again keeps company with red Antares in $\mathfrak{M}$, being only 3° north of that star. By the middle of November she will again be close to and above the Milk Maid's Dipper in $\uparrow$.

Jupiter, the Giant Planet, will be an Evening Star until September 18, being brightest February 28, and he will be a morning Star after September 18. He will retrograde or move westward past the stars until May 1. At the beginning of the year he will be in Ω and about midway between Regulus, in the Sickle, on the west, and Spica Virginis on the east. As the reader will see by the table "Position of the Planets," he remains in Ω until October and then enters the constellation $\mathfrak{M}$. His conjunction with ζ August 12 was noted under that planet. He will be only 1-5 of 1 degree or 12' south of her. He will be in conjunction with the Sun September 18 and will be invisible for several days before and after that date. His satellites or moons will be seen to the best advantage January to June. Any small glass will show four of the largest of them. It is very interesting to watch them disappear or reappear from the shadow of the planet, pass behind him (occultation), or pass across his face (transit).

Saturn, the Ringed Planet, lies in a very interesting portion of the heavens, being in $\mathfrak{X}$ and a south-east diagonal through the Square of Pegasus extended as far again will come close to him for almost the entire year, or quite so after March. In 1908 the rings of Saturn entirely disappeared. The most powerful telescopes could only detect an exceedingly slight protuberance on opposing sides of the planet where the rings were. This was owing to the fact that the plane of the rings was directed towards the earth. During 1909 this wonderful ring system will be telescopically visible and will steadily improve throughout the year. A good telescope, with a 3-inch object glass, will show his rings and moons very satisfactorily.

Uranus will be brightest. July 11 he is in $\uparrow$ and pointed at by the two lower stars in the Milk Maid's Dipper about 10° north-east. On March 26 he will be only 18' or about one-fourth of one degree north of Mars, and for a considerable period before and after that date may be identified by the aid of Mars, Uranus appearing as a dim star, but close observation will show change of position.

Neptune can only be seen by the aid of good telescope and perfect knowledge of his position. He will be brightest January 6 as an Evening Star in $\square$ directly below Castor and Pollux.

EXPLANATION.—THE CHART OF THE HEAVENS shows all the bright stars and groups visible in the U. S., Canada, Mexico, Cuba and Hawaii. Stars of the 3rd Magnitude are sometimes shown in order to complete a figure.

If a bright uncharted body be seen near the "ECLIPTIC CIRCLE" it must be a planet. To locate the planets or Moon, refer to the tables. "POSITION OF PLANETS" and "MOON'S PLACE" in the ALMANAC PAGES, find the proper signs on the chart on the "ECLIPTIC CIRCLE" and an inspection of that part of the Heavens, comparing with the CHART, will serve to identify the planet and all the surrounding objects.

Because of the Earth's motion from W. to E. (opposite to the direction of the arrow in the chart), the stars rise 4m. earlier each day or 30m. per week or 2h. a month. The chart shows the position at 9 P. M. Then if the position for any other hour be desired, as for 7 P. M., count back one month, or ahead one month for 11 P. M., and so on for any hour of the night.

A circle described from the zenith on the "ZENITH CIRCLE" for the desired Lat. with a radius of 90 degrees (see graduated meridian) will show what stars are above the horizon. Thus Capella is near the overhead (zenith) point on Lat. 40 degrees N. Jan. 15th, 9 P. M., as will be Algenib in the handle of the "Big Dipper" at 3 A. M. Then from Capella or Algenib all the surrounding visible groups can be identified. The "Pointers" being 5 degrees apart and always in sight may be used as a convenient unit of measure; also when visible, the "Belt of Orion" 3 degrees, or the sides of the "Square of Pegasus."

Questions will always be cheerfully answered by

Berlin H. Wright, DeLand, Fla.

RIISING AND SETTING OF THE PRINCIPAL PLANETS, 1909.

These wanderers in space are supposed to be the fragments of a disrupted world or planet that once had its orbit between that of Mars and Jupiter. When they come within the sphere of attraction of the earth they are gradually drawn out of their course and upon entering our atmosphere become heated by its resistance and are thereby rendered luminous. If the fragments are small they will be consumed before reaching us and only their ashes ("star dust") fall to the earth. If large, they usually burst, with loud reports, when near the earth, and these fragments are known as aerolites or bolides. Often they are so numerous as to be known as meteoric showers and their periodic visits have been computed. (At each succeeding return the earth gathers to itself more and more of them, either in the form of ashes or solid masses.) The following are the principal dates when displays of meteors are to be expected: Jan. 2, 3, 8, 17; Feb. 3, 6; Mch. 2, 11; Apr. 1, 5, 12, 19-23; May 2; June 7, 11, 28; July 1, 5; Aug. 6-12, 22; Sep. 1, 17, 25; Oct. 2, 5, 21, 30; Nov. 1, 9, 11-15, 24-28 and Dec. 6-13, 20, 22 and 27.

		VENUS ♀		MARS ♂		JUPITER ♃		SATURN ♄	
		Rises a Morning Star		Rises a Morning Star		Rises an Evening Star		Rises an Evening Star	
		Florida	Cuba	Florida	Cuba	Florida	Cuba	Florida	Cuba
		H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.
Jan.	1	4 52	4 39	3 30	3 19	10 10	10 14	11 34	11 35
	11	5 10	4 56	3 22	3 10	9 30	9 34	10 58	10 58
	21	5 26	5 11	3 14	3 00	8 49	8 53	10 21	10 21
Feb.	1	5 39	5 25	3 05	2 51	8 00	8 04	9 42	9 42
	11	5 47	5 35	2 57	2 42	7 17	7 22	9 06	9 05
	21	5 51	5 41	2 47	2 32	6 32	6 37	8 33	8 31
Mch.	1	5 51	5 43	2 40	2 25	Sets	Sets	8 05	8 03
	11	5 50	5 45	2 29	2 14	Morn.	Morn.	7 32	7 30
	21	5 45	5 42	2 18	2 08	5 09	5 03	6 58	6 56
Apr.	1	5 39	5 40	2 04	1 50	4 22	4 14	♂ ☉	3d
	11	5 34	5 36	1 48	1 35	3 41	3 35	Rises	Rises
	21	Eve.	Eve.	1 35	1 23	3 00	2 54	Norn.	Norn.
May	1	Sets	Sets	1 18	1 07	2 20	2 14	4 19	4 21
	11	6 54	6 43	1 00	50	1 41	1 35	3 43	3 45
	21	7 14	7 01	42	33	1 03	0 57	3 06	3 09
June	1	7 34	7 19	Eve.	Eve.	Eve.	Eve.	2 27	2 30
	11	7 52	7 37	11 57	11 53	11 42	11 36	1 54	2 00
	21	8 04	7 49	11 37	11 32	11 05	10 59	1 13	1 16
July	1	8 13	7 59	11 14	11 10	10 31	10 26	Eve.	Eve.
	11	8 17	8 05	10 49	10 46	9 54	9 50	11 58	11 59
	21	8 18	8 08	10 22	10 20	9 23	9 19	11 23	11 26
Aug.	1	8 14	8 08	9 51	9 50	8 44	8 40	10 40	10 43
	11	8 09	8 06	9 19	9 18	8 00	7 52	10 02	10 05
	21	8 01	8 00	8 42	8 40	7 37	7 34	9 22	9 25
Sept.	1	7 53	7 56	7 58	7 56	7 00	6 57	8 33	8 36
	11	7 45	7 45	7 15	7 13	♂ ☉	18th	7 57	8 00
	21	7 40	7 48	Sets	Sets	Invisible	Invisible	7 16	7 19
Oct.	1	7 35	7 46	Morn.	Morn.	Morn.	Morn.	6 34	6 37
	11	7 35	7 39	4 25	4 28	4 41	4 41	5 48	5 50
	21	7 38	7 54	3 42	3 45	4 11	4 11	Sets	Sets
Nov.	1	7 45	8 01	3 02	3 05	3 39	3 40	Morn.	Morn.
	11	7 54	8 12	2 30	2 32	3 08	3 07	3 41	3 38
	21	8 06	8 23	2 04	2 05	2 37	2 36	3 19	3 16
Dec.	1	8 16	8 31	1 38	1 36	2 04	2 02	2 37	2 34
	11	8 26	8 40	1 20	1 18	1 32	1 30	1 57	1 54
	21	8 30	8 40	1 04	1 02	0 58	0 56	1 18	1 16
	31	8 29	8 37	0 47	0 43	0 23	0 21	0 50	0 48

Fixed and Movable Feasts or Church Days.

New Year's Day, January 1.
 Conversation of St. Paul, January 25.
 Purification B. V. M., February 2.
 Septuagesima Sunday, February 7.
 St. Valentine Sunday, February 14.
 Sexagesima Sunday, February 14.
 Quinquagesima Sunday, February 21.
 Shrove Tuesday, February 23.
 Ash Wednesday, (Lent begins), February 24.
 Quadragesima Sunday, February 28.
 St. Patrick's Day, March 17.
 Mid-Lent Sunday, March 21.
 Palm Sunday, April 4.
 Good Friday, April 9.
 Easter Sunday, April 11.
 Low Sunday, April 18.
 St. George, April 23.
 St. Mark, April 25.
 Saints Philips and James, May 1.
 Rogation Sunday, May 16.
 Ascension (Holy), Thursday, May 20.
 Whit Sunday, (Pentecost) May 30.
 Trinity Sunday, June 6.
 Corpus Christi, June 10.
 St. Barnebas, June 11.
 St. John the Baptist, June 24.
 Saints Peter and Paul, June 29.
 St. James, July 25.
 Transfiguration, August 6.
 St. Bartholomew, August 24.
 St. Mathew, September 21.
 Michaelmas, (St. John and All Angels) September 29.
 St. Luke, October 18.
 Saints Simon and Juce, October 28.
 Thanksgiving Day, November 25.
 Advent Sunday, November 28.
 St. Andrew, November 30.
 St. Thomas, December 21.
 Christmas Day, December 25.
 St. Stephen, December 26.
 St. John the Evangelist, December 27.
 Holy Innocents, December 28.

EMBER DAYS.

Wednesday, Friday and Saturday after—
 1st Sunday in Lent, March 3, 5, and 6.
 Pentecost, June 2, 4, and 5.
 September 14, September 15, 17, and 18.
 December 13, December 15, 17, and 18.

Morning Stars (West of Sun.)

Mercury, (See "Planets Brightest.")
Venus, until April 28.
Mars, until May 13.
Jupiter, after September 18.
Saturn, from April 3 to July 15.
Uranus, from January 7 to April 11.

Evening Stars (East of Sun.)

Mercury, (See Planets Brightest.)
Venus, after April 28.
Mars, after May 13.
Jupiter, until September 18.
Saturn, until April 3 and after July 15.
Uranus, until January 7 and after April 11.

Planets Brightest.

Mercury, March 3-3 and October 25-31 as a morning star, rising shortly before the sun. Also April 27 to May 3, and September 20-26, as an evening star, setting shortly after the sun. **Venus**, not this year, but she will be bright in December. **Mars**, September 25.* **Jupiter**, February 28. **Saturn**, October 13. **Uranus**, July 11.

*At this time Mars will be slightly brighter than he was at his opposition in 1907. This will be the last favorable opportunity to communicate with or study the handiwork of the Martians until the year 1924. In 1907 the peculiar markings on Mars' surface were decided to be canals for irrigation. Mars is therefore surely inhabited.

Situations of Planets for the Sundays; also Moon's Position for the Year

	JAN.	FEB.	MCH.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
Venus.....(♀).. Mars.....(♂).. Jupiter.....(♃).. Saturn.....(♄).. Uranus.....(♅).. MOON Apogee..... Perigee..... Higest.....(☉).. Lowest.....(☌).. Ascending Node....(♊).. Descending Node...(♋).. 	♍ ♌ ♌ ♏ ♏ 11 23 5 19 5 20 	♏ ♍ ♌ ♏ ♏ 8 20 1 15 1-28 15 	♏ ♏ ♌ ♏ ♏ 7 21 1-28 15 27 14 	♏ ♏ ♌ ♏ ♏ 3-30 18 24 11 23 10 	♏ ♏ ♌ ♏ ♏ 28 16 22 9 28 8 	♏ ♏ ♌ ♏ ♏ 25 12 98 5 17 4 	♏ ♏ ♌ ♏ ♏ 23 7 15 2-30 14 1-29 	♏ ♏ ♌ ♏ ♏ 19 3 11 26 10 25 	♏ ♏ ♌ ♏ ♏ 16 1-29 7 23 6 21 	♏ ♏ ♌ ♏ ♏ 13 27 5 20 3-39 18 	♏ ♏ ♌ ♏ ♏ 3 25 1-29 16 27 14 	♏ ♏ ♌ ♏ ♏ 7 22 26 14 24 11

Explanation of Signs. ♈ Aries. ♉ Taurus. ♊ Gemini. ♋ Cancer. ♌ Leo. ♍ Virgo. ♎ Libra. ♏ Scorpio. ♐ Sagittarius. ♑ Capricornus. ♒ Aquarius. ♏ Pisces. The place indicated for the planets is for the 1st, 2nd, 3rd, 4th and 5th Sundays of each month, in the order of the planets.

The Weather.

The forecasts as given in this almanac at the top of each calendar page are not "prophecies" or "guesses," but are calculations based on sound scientific principles from observations made during many years.

For "long range" forecasts they will compare favorably with 24 or 36 hour forecasts and will be considered as being fulfilled when compared with official observations covering the period for which they are made, and for any locality within the State, under the following conditions, viz.: If it rains within 12 hours before or after the date given for rain. For warm and cold periods allow 5 days, as they may occasionally overlap. Storm periods cover 3 days. The stormy, warm and cold periods, etc., as noted in these forecasts are the principal characteristics of the month, and will answer for all practical purposes.

It must not be understood that "storm period" means that storms are expected to prevail at all places within the range of the district covered by this almanac at one time, as all storms are progressive. That is, the entire storm area is constantly shifting, having certain paths which they prefer, which doubtless are in the direction of least resistance in front and greatest push from behind. The periods noted, then, are the times within which disturbance is most likely to occur at some place; hence the margin of 12 h. above mentioned. Then, again, the disturbance may take on a variety of forms, as chiefly electrical or of wind alone, according to the location of the observer within the storm area.

Time Used in This Almanac.

All the calculations in this almanac are based upon mean or clock time unless otherwise stated. The Sun's rising and setting are for the upper limb, corrected for parallax and refraction. In the case of the moon no correction is needed, as in the Sun, for "parallax and refraction;" with her they are of an opposite nature and just balance each other. The figures given, therefore, are for the Moon's centre on a true horizon, such as the ocean or a large plain affords.

The figures in the Florida column are for the latitude of Jacksonville and are good for all North and West Florida. The Cuban division is for Central Cuba and will answer for all of Cuba and fairly well for Porto Rico. If the rising or setting of the Sun or Moon for any intermediate point be desired, as in South Florida, as Tampa, midway between the two extremes, the reader can interpolate thus:

Sun rises January 1 North Florida	6:56
Sun rises January 1 Cuba	6:39

Difference 17 m.

Therefore one-half of 17 minutes added to the lesser or subtracted from the greater—the correct time for a point midway between the extremes—or 6:43=sun rises at Tampa. Do the same with the rising or setting of the Moon.

To convert into Standard Time of the Central Division see the following table, where enough places are given in every Florida county to enable one in any place not mentioned to fix upon the correction necessary.

Abe's Springs.....	—18	Bristol.....	—19
Altamonte.....	—34	Bronson.....	—29
Altoona.....	—33	Brooksville....	—30
Apalachicola.....	—19	Callahan.....	—32
Spopka.....	—34	Canaveral.....	—38
Auburndale.....	—33	Carrabella.....	—21
Avon Park.....	—34	Cedar Keys.....	—27
Bartow.....	—33	Cerro Gordo.....	—16
Blountstown.....	—18	Chattahoochee.....	—20
Braidentown.....	—30	Chipley.....	—17

Citra.....	—31	Melbourne.....	—38
Clear Water Harbor.....	—28	Miami.....	—39
Cocoanut Grove.....	—40	Micanopy.....	—31
Crawfordsville.....	—22	Milton.....	—11
Cutler.....	—40	Monticello.....	—24
Dade City.....	—31	New Smyrna.....	—36
Daytona.....	—36	New Troy.....	—27
DeFuniac Springs.....	—15	Ocala.....	—31
DeLand.....	—35	Orlando.....	—35
Euchee Anna.....	—15	Ormond.....	—36
Eustis.....	—33	Palatka.....	—33
Fernandina.....	—34	Palm Beach.....	—40
Fort Lauderdale.....	—39	Pensacola.....	—11
Fort Myers.....	—32	Perry.....	—25
Fort Pierce.....	—39	Pine Level.....	—32
Fruitland Park.....	—32	Punta Gorda.....	—31
Gainesville.....	—30	Quincy.....	—21
Green Cove Springs.....	—33	Rockledge.....	—37
Interlachen.....	—32	Sanderson.....	—30
Jacksonville.....	—33	Seville.....	—34
Jasper.....	—28	Silver Springs.....	—31
Jupiter.....	—39	St. Augustine.....	—35
Key West.....	—33	Sumpterville.....	—33
Kissimmee.....	—35	Tallahassee.....	—22
Lake Butler.....	—30	Tampa.....	—30
Lake City.....	—29	Tarpon Springs.....	—28
Lake Helen.....	—36	Titusville.....	—37
Live Oak.....	—27	Vernon.....	—17
Madison.....	—26	Wakulla Springs.....	—22
Monanna.....	—19	Wildwood.....	—31

Temperatures Injurious to Plants.

In the table below will be found the temperatures at which most of the plants are liable to be injured by frost. These temperatures are as nearly as possible those of the air in contact with the plant itself. Plants may very often be saved if they are slightly protected. A cover of cheese-cloth, branches of trees, or even newspapers will prevent nipping by frost

Plant or Fruit	In Bud	In Blossom	In Setting Time	At Other Times	Plant or Fruit	In Bud	In Blossom	In Setting Time	At Other Times
Almonds	28	30	30	28	Onions				20
Apples	27	29	30	26	Oranges	30	31	31	26—29
Apricots	30	31	32	30	Parsnips				27
Asparagus	29	29	29	26	Peaches	29	30	30	29
Bananas	31	31	32	31	Pears	28	29	29	28
Barley		29			Peas	29	30	30	25
Beans		31			Plums	30	31	31	29
Beets				25	Potatoes				
Cabbage				3—37	Irish	30	30	30	31
Cantaloupes	32	32		30—31	Potatoes				
Cauliflower				20—27	Sweet	31	31	31	31
Celery				28	Prunes	30	31	31	29
Cucumbers	31	31	31	32	Radishes				25
Cymlings or squash	31	31	31	30	Shrubs, Tree or Roses	26	28		30
Flowers	31	31	31	30	Spinach	30	32		26
Grapes	31	31	30	28	Strawberries	28	28	28	21
Grape-fruit	30	31	31	28	Tangerines	31	31	31	30
Lemons	30	31	31	28	Tomatoes	31	31	31	28
Lettuce				12—28	Turnips				31
Mandarins	31	31	31	28	Watermelons				26
Oats	31				Wheat		31	31	28—31
Okra				31	Walnuts				
Olives	30		31	18—24	English	30	31	31	28

Our "Cradle."

About Ourselves.

We take pleasure in presenting herewith to our friends and patrons in Florida and Cuba, the first Almanac ever compiled and published exclusively for those sections. In addition to giving our friends a ready reference guide, containing information especially applicable to their respective sections, we have attempted to impress upon them the importance of properly supplying their growing crops with well-balanced and scientifically compounded fertilizers, by listing our standard mixtures, fertilizing materials, etc. A few pages of the publication are devoted to other items such as spraying appliances, insecticides, etc., which will no doubt be found of general interest to the people of Florida and Cuba.

We believe that to a very large majority of the people in whose territory this publication is intended to circulate, the E. O. Painter Fertilizer Company is so well known that a formal introduction is unnecessary, for wherever oranges, vegetables and general farm products are grown, or rather, profitably grown, in Florida, the Painter Fertilizers are "known and respected."

To the new-comers, however, and to those who do not yet know us, but whose acquaintance we desire to make, a few words concerning this great company, its development, and its work in the interest of Florida horticulture, may be instructive and interesting.

The E. O. Painter Fertilizer Company is the successor to E. O. Painter & Co., established at DeLand, Fla., then the center of the great orange-growing section of the State, nearly a quarter of a century ago. The beginning was small, and the engraving on this page of the little hut surrounded by pine trees, shows the cradle of our present great business.

The business at DeLand grew from nothing to an average daily output of twenty tons, which in those early days was considered a very large business for a Florida manufacturing concern.

The great freeze of '94 and '95 greatly crippled the orange industry. The

factory, after struggling along for several years at that place, was finally moved to Jacksonville. The beginning at Jacksonville was likewise small, and the first year the value of the total output amounted to only \$27,000. Our output for the last fiscal year exceeded in value over \$553,000.00, and the present indications are that this year the total value of our product will come close to the three-quarter-of-a-million-dollars mark—and the end is not yet, as we are reaching out for the million dollar output.

This rapid growth, if it proves anything, proves conclusively that we are making what the people demand; that we are giving value received in every ton of material shipped from our factory. This is an obvious conclusion. People would not use such vast quantities of our goods if they were not satisfactory. Our business would not and could not have grown from nothing to its present magnitude had it not filled the long-felt wants and given a product that was worth to the consumers every cent it cost them. The tremendous growth of our business cannot be other than from the merits of our goods, because we have not employed drummers to solicit business prior to this year. In fact, the constant increase of our business has kept up with the output of our factory and it has not been until the last year, when we greatly increased the facilities of our factory that we were able to manufacture more than our trade used and demanded. This year we have put two canvassers in the field and they are doing splendid work, and we hope that some time during the season, one of our representatives will be able to see all of our customers at least once.

Our competitors have marveled at our success, but to those who have followed our career there is nothing mysterious about it. In the first place, our aim was to sell always what the buyer paid for, and to give value received in every shipment that went from our factory. But this alone would not have achieved the success we point to with so much pride and satisfaction. However honest and conscientious a fertilizer manufacturer might be, however good his intentions, these considerations would avail nothing without the ability to back up his conscientiousness and his good intentions by sound judgment and

Our South Jacksonville Plant.

a full and thorough knowledge of the peculiar requirements of Florida crops and the deficiencies of Florida soils.

It was perhaps, after all, this knowledge of the needs of our Florida soil-tillers by our Mr. E. O. Painter, the founder of the company, and its present president and manager, that contributed so much to our great success, as our correct business methods and our conscientious efforts to treat our customers fairly. Mr. Painter has been identified with Florida agricultural and horticultural development since his early manhood. His first work in the State was to assist in the planting of an orange grove, and since then his work in the line of making things grow in Florida soil—and making them grow profitably—has been incessant. While editor and publisher of *The Florida Agriculturist*, he was in close touch with the soil-tillers of the State, studied their needs and accumulated much information relative to the requirements of Florida soils and Florida crops. The people of Florida of late years have profited by this knowledge, as Mr. Painter has availed himself of his knowledge on this matter in compounding our fertilizers, and our standard mixtures are largely the result of his practical experience in horticultural work; knowing the needs of crops and the deficiency of the soil from a soil-tiller's standpoint, and applying scientific methods, he was in a position to supply what was needed in the form of properly balanced plant food constituents.

In a measure the Painter Brand of Fertilizers demonstrates conclusively the "survival of the fittest" theory. Other fertilizers that appeared on the arena with a blare of trumpets and the beating of toms-toms and other things (chiefly the buyers) have come and gone, and the Painter Brands, with one exception, are the only fertilizers now sold and used in Florida that were sold and used here twenty years ago. They are the only ones, with this one exception, that have stood the test of time, and not a single fertilizer manufactory that was operating when the Painter Factory was established is now in existence. Is this not truly a case of the survival of the fittest?

Our Jacksonville Plant.

Before we established our business, fertilizer consumers were compelled to take what was offered them in the way of fertilizers. They had no word and no voice in the matter of formula. The manufacturers mixed the goods, and the growers could either use it as mixed, or use barn-yard manure—or do without. We were the first to allow the consumers to have a voice in the matter of mixtures; in other words, we mixed the chemicals as the consumers desired, always, when requested, giving them the benefit of our information and varied experience. In addition to this we inaugurated a campaign of special mixtures for special soils and specific crops. When the need of a grower was made known to us, we compounded the fertilizers to meet his special requirements.

Another plan we inaugurated—and in this we were the first not only in Florida but anywhere else—and that was in opening the market for agricultural chemicals and other fertilizing materials to the consumers. Until we did this it was impossible for the farmers and fruit growers to buy chemicals in the market. Now they can get them, and, if desired, mix their own fertilizers. The growers in no other State in the Union can do this.

The people of Florida have shown their appreciation of our work along the line recited above, by their ever-increasing patronage, and we desire in turn to express our appreciation of same and to assure them that our efforts in their behalf will be in no way relaxed.

To sum up the causes of our great growth: It is evident that our goods merited the success they achieved; that every ton of goods we have shipped has been an advertisement of our brands; that our innovations in the matter of special mixtures and the opening of the chemical market to consumers, were appreciated, and that the experience and advice of our president in horticultural matters, freely tendered to our customers, has been of inestimable benefit to them.

On these pages are shown engravings of our Jacksonville and South Jacksonville plants, as they are at present.

Compare these with the "cradle" of our business, as shown on the preceding page, and take into consideration the fact that the business was established practically without capital, that we have endured freezes, fires, panics and hurricanes, and can any conclusion be reached other than that there was merit behind and with our product? And that merit won where others without merit, though operating under more favorable conditions, failed.

Our President.

To Users of Fertilizers.

It makes no difference what crop you raise, we can furnish you, at your pleasure, with the best form of plant food for same. The following pages contain the analysis of numerous brands, and they are all "TIME-TRIED AND CROPTESTED." Besides these brands we carry in stock nearly every known kind of chemical or material that is used in the manufacture of fertilizers, or contains one or more of the elements of plant food.

From these we can make any formula that our customers may want for special crops or special lands.

We wish to call your attention to the fact that in making our fertilizers there is over thirty years' experience in Florida behind same.

The fact that we are in the fertilizer business today, is the direct outgrowth of our efforts, thirty years ago, to gain practical information along these lines, by experiments conducted on our own place for the benefit of the readers of the Florida Agriculturist. We knew from actual experience that to make fruit growing and trucking profitable we had to buy plant food of a better quality than what we were then getting, and at a less price than we were then paying. After a series of experiments covering a period of several years, we found what we believed to be the best combination of plant foods for our soil and climate, and for the different crops to which they were to be applied. The results that we first obtained were so marked and satisfactory that it was not long before our neighbors wanted us to furnish them, and thus, from a beginning of less than 50 tons a year, our trade rapidly increased until, at the time of the freeze, we were putting out 120 tons per week, and were over 200 tons behind our orders. This trade was built up on the approved merits of our goods. Groves that had never borne enough fruit to pay expenses were made to produce heavy crops through successive years, and non-paying property was changed into profitable investments. So marked was the effect in producing growth and fruit that the groves around DeLand on which they were used became known throughout the state, and grove-owners from all quarters visited DeLand to inspect the groves for themselves, and see if what they had heard about them was true. They were convinced that it could be done one year, but doubted if it could be repeated; but when they came the second and third year and found the same trees loaded even more heavily than the first year, they admitted that all that was claimed for the fertilizer was true.

We were the first manufacturers to offer to the growers all kinds of fertilizing materials. There is no other state in the Union where a grower can get any fertilizing material he may want as quickly and cheaply as in Florida. We were the first, but others had to follow or lose their trade.

We were the first to print on our tags, not only the analysis, but also the source of the plant food. This was before any fertilizer law existed. Now all have to do it. We were the first to adopt the plan of mixing only one ton of fertilizer at a time. This accounts for the uniformity of our goods. Now other factories are doing the same thing. Our brands and methods have been copied, but our competitors can not get the knowledge that thirty years' actual experience in Florida has given, and which is held in store to assist any of our customers who want information on plant nutrition or overcoming trouble in grove, garden or farm, such as sour soils, fungus and insect enemies.

Information cheerfully given.

E. O. PAINTER FERTILIZER CO.

Fort Pierce, Fla.

E. O. Painter Fertilizer Company,
Jacksonville, Fla.

Gentlemen:—I have been well pleased with the fertilizer I got from you and have recommended your firm to every one that wanted fertilizer, and shall continue to do so.

Yours very truly,

(Signed) R. E. BLANCHARD.

The Difference.

Many a grower, on comparing the analysis of two brands of fertilizer that are nearly alike, wonder why the great difference in price. The difference in cost is on account of the different sources of plant food used in making up the brands. For instance, Available Phosphoric Acid from phosphate rock costs only about \$1.00 per unit, while a unit of Available Phosphoric Acid from animal bone or bone black will cost about \$1.50. Potash in the form of muriate costs less than in sulphate, but one must know when to use the two kinds, otherwise the muriate may prove the most costly. Our aim is to use only such materials as experience teaches are the best for the crop to be raised. Our Simon Pure brands are those that derive their available phosphoric acid from dissolved bone black or animal bone, and our Gem brands, with one or two exceptions, are those where acid phosphate or dissolved phosphate rock is the source of available phosphoric acid. For the convenience of our customers we have arranged both the Simon Pure and Gem brands under their respective heads, so that an orange grower does not have to look through the whole booklet for the brand he wants, nor the vegetable grower to read the orange tree formulas.

Weights and Measures for the Household.

Every housekeeper knows the old saying—

A pint's a pound
The world around.

Here are others equally useful, though not as easily remembered.

- 1 teaspoon liquid equals 4 saltspoons.
- 1 tablespoon liquid equals 4 teaspoons.
- 1 tablespoon dry material equals 3 teaspoons.
- 1 wineglass liquid equals 4 tablespoons, or 1-2 gill, or 1-4 cup.
- 1 cup equals 1-2 pint, or 2 gills, or 16 tablespoons liquid, or 12 tablespoons dry material, or 8 heaping tablespoons dry material.
- 1 quart liquid equals 4 cups.
- 1 quart flour equals 1 pound, or 4 cups.
- 1 pint milk or water equals 1 pound.
- 1 pint chopped meat packed solidly equals 1 pound.
- 1 pound solid butter equals 2 cups.
- 1 pound of granulated sugar equals 2 cups.
- 1 pound powdered sugar equals 2 1-2 cups.
- 1 pound meal equals 3 cups.
- 1 pound eggs is (about) 9 large or 10 medium-sized eggs.

WELL PLEASED.

Neptune, Fla.

E. O. Painter Fertilizer Company,
Jacksonville, Fla.

Gentlemen:—Yours of the 1st just at hand. I certainly have no cause of complaint, on the contrary do not see how I could ask for better treatment. You will certainly find me again on your list of well pleased customers.

Yours truly,

(Signed) A. R. GERBER.

THINKS THEY ARE THE BEST FERTILIZERS.

Lakemont, Fla., Dec 4, 1905.

E. O. Painter Fertilizer Company,
Jacksonville, Fla.

Gentlemen:—Simon Pure No. 1 and Simon Pure No. 2 are the BEST FERTILIZERS in Florida, and I shall always do all I can to introduce them.

Respectfully,

(Signed) B. M. HAMPTON.

1st Month

JANUARY, 1909

31 Days

WEATHER FORECASTS

1 to 3, warm period, cloudy in Cuba;
4 to 5, severe storm period, gales, rain;
6 to 7, cold period; 8 to 9, warmer, local
showers, windy; 10 to 11, storm period,
brisk gales, rain in Florida; 12 to 14,
cold period, cold wave; 15 to 17, warm

period; dry in Cuba; 17 to 20, cooler, light
clouds; 20 to 21, storm period, gales; rain
in Florida; 22 to 25, cold period, frosts in
Florida; 26 to 28, warmer; 29 to 30, storm
period, fresh to brisk gales; rains; 31, cold;
frosts in north Florida.

Summary } Florida, slightly colder than the average; rainfall less.
Cuba, rainfall less than normal; temperature higher.

MOON'S PHASES.				Day		Eastern Time--Cuba.			Day		Central Time--Florida		
☾	Full Moon	.....	6th	.....	9 h. 12 m.	—Morn....			6th	.....	8 h. 12 m.	—Morn.	
☾	Last Quarter	.....	14th	.....	1 h. 11 m.	—Eve.....			14th	.....	0 h. 11 m.	—Eve.	
☾	New Moon	.....	21st	.....	7 h. 12 m.	—Eve.....			21st	.....	6 h. 12 m.	—Eve.	
☾	First Quarter	.....	28th	.....	10 h. 7 m.	—Morn....			28th	.....	9 h. 7 m.	—Morn.	

Day of Month	Day of Week	Moon's Place at 7 P. M.	Sun at Noon Mark	Moon in Meridian (South)	High Water Key West* (See table).	FLORIDA			CUBA		
						Sun Rises	un Sets	Moon Sets and Rises	Sun Rises	Sun Sets	Moon Sets and Rises
		Con. Deg.	H. M.	EVE.	MORN	H. M.	H. M.	MORN	H. M.	H. M.	MORN
1	Friday ...	♊ 16	12 04	8 18	4 54	6 56	5 12	2 15	6 39	5 29	2 08
2	Saturday ..	♋ 0	12 04	9 08	5 58	6 56	5 13	3 08	6 40	5 30	2 57
3	Sunday ..	♋ 13	12 05	10 00	6 56	6 57	5 14	4 09	6 40	5 31	3 55
4	Monday..	♋ 26	12 05	10 53	7 46	6 57	5 15	5 09	6 40	5 32	4 52
5	Tuesday..	♌ 8	12 05	11 47	8 32	6 57	5 16	6 07	6 41	5 33	5 49
6	Wedn'day	♌ 21	12 06	Morn.	9 14	6 57	5 16	Rises Ev	6 41	5 33	Rises Ev
7	Thursday	♌ 3	12 06	40	9 55	6 57	5 17	6 19	6 41	5 34	6 36
8	Friday ...	♌ 15	12 07	1 30	10 36	6 57	5 18	7 14	6 41	5 34	7 28
9	Saturday ..	♌ 27	12 07	2 18	11 15	6 57	5 19	8 10	6 41	5 35	8 22
10	Sunday ..	♌ 9	12 08	3 04	11 55	6 57	5 20	9 03	6 41	5 36	9 11
11	Monday..	♌ 21	12 08	3 46	Ev 27	6 57	5 21	9 56	6 41	5 36	10 01
12	Tuesday..	♍ 3	12 08	4 28	1 00	6 57	5 21	10 48	6 41	5 37	10 50
13	Wedn'day	♍ 15	12 09	5 08	1 34	6 56	5 22	11 41	6 41	5 37	11 46
14	Thursday	♍ 27	12 09	5 49	2 16	6 56	5 22	Morn.	6 41	5 38	Morn.
15	Friday,...	♍ 9	12 10	6 31	2 58	6 56	5 23	35	6 41	5 38	30
16	Saturday ..	♍ 22	12 10	7 16	3 46	6 56	5 24	1 33	6 41	5 39	1 25
17	Sunday ..	♍ 5	12 10	8 04	4 36	6 56	5 25	2 32	6 41	5 40	2 20
18	Monday..	♍ 18	12 11	8 56	5 28	6 56	5 26	3 34	6 41	5 40	3 19
19	Tuesday..	♎ 2	12 11	9 54	6 18	6 56	5 27	4 40	6 41	5 41	4 22
20	Wedn'day	♎ 17	12 11	10 54	7 08	6 56	5 27	5 43	6 41	5 42	5 25
21	Thursday	♎ 3	12 11	11 57	7 58	6 56	5 28	6 45	6 41	5 42	6 26
22	Friday...	♎ 16	12 12	Ev 59	8 50	6 55	5 29	Sets Ev.	6 41	5 43	Sets Ev.
23	Saturday ..	♎ 1	12 12	1 58	9 42	6 54	5 30	7 34	6 40	5 44	7 45
24	Sunday...	♎ 16	12 12	2 54	10 35	6 54	5 31	8 43	6 40	5 45	8 50
25	Monday..	♏ 1	12 12	3 46	11 32	6 53	5 32	9 50	6 40	5 46	9 53
26	Tuesday..	♏ 15	12 13	4 37	Morn.	6 53	5 33	10 55	6 40	5 46	10 53
27	Wedn'day	♏ 29	12 13	5 26	35	6 53	5 34	11 59	6 40	5 47	11 53
28	Thursday	♏ 13	12 13	6 15	1 51	6 52	5 35	Morn.	6 40	5 47	Morn.
29	Friday ...	♏ 27	12 13	7 05	3 18	6 52	5 35	1 01	6 39	5 49	51
30	Saturday ..	♏ 10	12 13	7 56	4 38	6 51	5 36	2 03	6 39	5 49	1 50
31		♏ 23	12 14	8 49	5 51	6 51	5 37	3 03	6 38	5 49	2 45

*This High Water is the first one that follows the Moon's meridian passage. To obtain all the other tides of the day and for all the ports or sea-side places of Florida and Cuba see the Explanatory Note accompanying the Tide Table on page 2.

Our Standard Mixtures.

For the Orange Grove.

Orange groves are located on a great many soils and require different kinds of fertilizer. In the following list the grower can find the brand that will suit the conditions and his soil best.

SIMON PURE No. 1.

Price Per Ton \$41.00.

GUARANTEED ANALYSIS.

Ammonia 4 per cent.
Potash Actual 12 per cent.
Available Phosphoric Acid ... 6 Per Cent.

Made exclusively from Sulphate Ammonia, Sulphate Potash and Dissolved Bone Black.

No brand of fertilizer has given the universal satisfaction on fruiting groves that our No. 1 has. While it is higher in price per ton than many brands on the market, there is no brand that carries a higher per cent. of plant food in the best and most available form. It is made from pure chemicals, and not one ounce of organic matter is used. This is essentially a fruit producing fertilizer, but it contains enough growing qualities to keep the trees in a good, healthy condition and make enough new growth each year to furnish an abundance of fruit-bearing wood. It has been used with equally good results on peach trees and grape vines.

SIMON PURE SPECIAL No. 1.

Price Per Ton \$41.00.

GUARANTEED ANALYSIS.

Ammonia 2 per cent.
Potash (K₂O), water soluble . 16 per cent.
Available Phosphoric Acid 6 per cent.

Made from Sulphate of Ammonia, Sulphate of Potash and Dissolved Bone Black.

Experience has shown in many cases that a fertilizer containing 2 per cent of Ammonia but high in potash, gives excellent results for fall applications to orange trees, or to apply where there is a large accumulation of vegetation in the soil which furnishes considerable Ammonia. This fertilizer is made of absolutely pure chemicals and can be broadcast without losing any of the fertilizing qualities.

GEM FRUIT AND VINE.

Price Per Ton \$32.00.

GUARANTEED ANALYSIS.

Ammonia 3 per cent.
Potash 10 per cent.
Available Phosphoric Acid..... 6 per cent.

Made from Sulphate Ammonia, Nitrate

Soda, Dried Blood, Sulphate Potash and Acid Phosphate.

This brand is especially adapted for groves situated on hammock or low lands, where a high per cent. of potash is needed and only enough ammonia is required to invigorate the tree and assist the latent nitrogen already in the soil.

SIMON PURE No. 2.

Price Per Ton, \$39.00.

GUARANTEED ANALYSIS.

Ammonia 4 per cent.
Potash 6 per cent.
Phosphoric Acid Available..... 6 per cent

Made exclusively from Sulphate of Ammonia, Sulphate Potash, Dissolved Bone Black and Blood and Bone.

For young trees and nursery stock this brand is especially adapted. It contains enough fruit-producing qualities to enable the trees to make a vigorous and healthy growth and also to produce a fair crop of fruit. Numerous young groves on which our No. 2 has been used produced enough fruit to pay the expenses of caring for the groves.

SIMON PURE SPECIAL No. 2.

Price Per Ton, \$39.00.

GUARANTEED ANALYSIS.

Ammonia 5 per cent.
Potash 6 per cent.
Available Phosphoric Acid..... 6 per cent.

This fertilizer is made from Sulphate of Ammonia, Sulphate of Potash and Dissolved Bone Black.

We have had considerable demand from some of the best growers for a fertilizer higher in Ammonia than our No. 1, but all the Ammonia to come from a chemical source. We are therefore making our Simon Pure Special No. 2, with all its plant food from a chemical source. This is especially valuable where non-cultivation is practiced or where it is impossible to plow the grove.

(Standard mixtures and formulas continued on page 22.)

2nd Month

FEBRUARY, 1909

28 Days

WEATHER FORECASTS

1 to 2, warmer, dry in Cuba; 3 to 4, severe storm period; 5 to 7, cold period; frosts in Florida; 8 to 12, warm period, becoming threatening; 13 to 15, storm period; gales, rain; 6 to 18, cold period;

clear in Cuba; 19 to 20, warm period, becoming threatening; 21 to 22, cold, becoming stormy; 23 to 25, continued cold clears off; frosts; 26 to 28, warm period.

Summary } Florida, cooler than the average; rainfall below.

Cuba, temperature about normal; rainfall slightly above.

MOON'S PHASES

Day

Eastern Time--Cuba

Day

Central Time--Florida

☾ Full Moon.....5th.....3 h. 25 m. Morn.....5th.....2 h. 25 m. Morn,
 ☾ Last Quarter... 13th.....7 h. 47 m. Morn....13th.....6 h. 47 m. Morn.
 ☾ New Moon.....20th.....5 h. 52 m. Morn....20th.....4 h. 52 m. Morn.
 ☾ First Quarter...26th.....9 h. 49 m. Eve.....26th.....8 h. 49 m. Eve.

Day of Month	Day of Week	Moon's Place at 7 P. M.	Sun at Noon Mark	Moon in Meridian (South)	High Water Key West* (See Table)	FLORIDA			CUBA		
						Sun Rises	Sets	Moon Sets and Rises	Sun Rises	Sun Sets	Moon Sets and Rises
		Con. Deg.	H. M.	EVE.	MORN	H. M.	H. M.	MORN	H. M.	H. M.	MORN
1	Monday..	♌ 5	12 14	9 41	6 50	6 50	5 38	4 02	6 38	5 50	3 43
2	Tuesday..	♌ 17	12 14	10 34	7 38	6 50	5 39	4 57	6 37	5 50	4 38
3	Wedn'day	♌ 30	12 14	11 25	8 20	6 49	5 40	5 49	6 37	5 51	5 30
4	Thursday	♍ 12	12 14	Morn.	8 57	6 48	5 41	Rises Ev	6 36	5 51	Rises Ev
5	Friday...	♍ 24	12 14	13	9 31	6 48	5 41	6 01	6 36	5 52	6 15
6	Saturday.	♍ 6	12 14	59	10 02	6 47	5 42	6 56	6 35	5 53	7 06
7	Sunday...	♍ 18	12 14	1 43	10 34	6 46	5 43	7 50	6 35	5 53	7 57
8	Monday..	♍ 29	12 14	2 25	10 56	6 45	5 44	8 32	6 34	5 54	8 34
9	Tuesday..	♎ 11	12 14	3 06	11 18	6 44	5 45	9 34	6 34	5 55	9 33
10	Wedn'day	♎ 23	12 14	3 46	11 43	6 43	5 46	10 27	6 34	5 55	10 23
11	Thursday.	♎ 5	12 14	4 27	Ev 10	6 42	5 47	11 22	6 33	5 56	11 15
12	Friday...	♎ 18	12 14	5 10	44	6 41	5 47	Morn.	6 33	5 56	Morn.
13	Saturday.	♎ 0	12 14	5 55	1 38	6 41	5 48	19	6 32	5 57	08
14	Sunday...	♎ 13	12 14	6 44	2 46	6 40	5 49	1 18	6 31	5 57	1 04
15	Monday..	♎ 26	12 14	7 37	4 00	6 40	5 50	2 21	6 30	5 58	2 03
16	Tuesday..	♏ 10	12 14	8 35	5 07	6 39	5 50	3 24	6 29	5 59	3 05
17	Wedn'day	♏ 24	12 14	9 35	6 07	6 38	5 51	4 25	6 29	5 59	4 06
18	Thursday.	♏ 9	12 14	10 37	7 04	6 37	5 51	5 23	6 28	6 00	5 05
19	Friday...	♏ 24	12 14	11 38	7 57	6 36	5 52	6 14	6 28	6 00	6 00
20	Saturday.	♏ 10	12 14	Ev 37	8 48	6 36	5 53	Sets Ev.	6 27	6 00	Sets Ev.
21	Sunday...	♏ 25	12 14	1 33	9 39	6 35	5 53	7 30	6 26	6 01	7 35
22	Monday..	♏ 10	12 14	2 26	10 30	6 34	5 54	8 39	6 25	6 01	8 39
23	Tuesday..	♏ 25	12 14	3 18	11 44	6 33	5 55	9 45	6 25	6 02	9 40
24	Wedn'day	♏ 9	12 13	4 09	Morn.	6 31	5 56	10 50	6 24	6 02	10 42
25	Thursday	♏ 23	12 13	5 00	25	6 30	5 57	11 55	6 23	6 02	11 47
26	Friday...	♏ 6	12 13	5 52	1 38	6 29	5 58	Morn.	6 23	6 03	Morn.
27	Saturday.	♏ 19	12 13	6 45	2 58	6 28	5 58	57	6 22	6 03	42
28	Sunday...	♏ 2	12 13	7 38	4 23	6 27	5 59	1 58	6 21	6 04	1 39

*This High Water is the first one that follows the Moon's meridian passage. To obtain all the other tides of the day and for all the ports or sea-side places of Florida and Cuba see the Explanatory Note accompanying the Tide Table on page 2.

GEM ORANGE TREE.

Price Per Ton, \$34.

GUARANTEED ANALYSIS.

Ammonia 4 per cent.
 Potash 6 per cent.
 Available Phosphoric Acid..... 5 per cent.

Made from Sulphate Ammonia, Nitrate Soda, Blood, Bone; Sulphate Potash and Acid Phosphate.

Use this brand on young orange or peach trees or any trees or shrubbery where growth is wanted. After the trees have attained fair size, apply Gem Fruit and Vine.

Die Back.

There is possibly no disease of the citrus family more troublesome in Florida than Die Back in its various forms. This disease can be caused by too much Ammonia in the soil, which has been applied in highly Ammoniated fertilizer, especially if the Ammonia is derived from organic Ammoniates, or by turning under a large quantity of vegetation, such as velvet beans, beggar weed, cow peas, etc. It is not infrequent, however, that Die Back is caused by Humic Acid in the soil, which prevents the tree from assimilating the plant food which is given to it. Both cases require different treatment.

Where the trouble is from too much Ammonia—a fertilizer containing only Phosphoric Acid and Potash should be applied. This should be put on broadcast and as little cultivation given the trees as possible. In a short time the excess of Ammonia will be used up and the tree will return to its normal condition.

SIMON PURE DIE BACK.

Price Per Ton, \$33.00.

GUARANTEED ANALYSIS.

Potash (K 2O).....13½ per cent.
 Phosphoric Acid..... 8 per cent.

Potash from Sulphate Potash, and Available Phosphoric Acid from Dissolved Bone Black. This fertilizer contains other ingredients than mentioned above, which form part of the curative properties of this mixture for curing Die Back in the citrus family.

GEM DIE BACK.

Price Per Ton, \$26.00.

GUARANTEED ANALYSIS.

Potash (K 2O).....13½ per cent.
 Available Phosphoric Acid.... 7 per cent.

Potash from Sulphate Potash, and Available Phosphoric Acid from Acid Phosphate.

This fertilizer contains other ingredients than mentioned above, which form part of the curative properties of this mixture for curing Die Back in the Citrus family.

The main difference in these two brands is that in our Simon Pure the Phosphoric Acid is derived from Dissolved Bone Black, while in the Gem Brand it is derived from Acid Phosphate, or what is sometimes called Florida "Dissolved Bone." The fertilizer should be applied in the same quantity that would be given the tree in its normal condition, that is, if the tree has been receiving 10 pounds of complete fertilizer it should now receive 10 pounds of the Die Back fertilizer.

AMMONIATED DIE BACK No. 3.

Price Per Ton, \$45.00.

For trees showing early symptoms of die back, melanose or red rust.

AMMONIATED DIE BACK No. 5.

Price Per Ton, \$50.00.

To be used on trees very badly affected with melanose, die back or kindred diseases.

Our Ammoniated Die Back fertilizers have given wonderful results in the way of curing trees that are troubled with Die Back caused from Humic Acid in the soil. Besides containing material to counteract the Humic Acid, this fertilizer carries a good percentage of Ammonia and Potash which puts the trees in good condition soon after the fertilizer is applied. Trees that have been given up as too far gone for recovery have been made to produce a good growth and a liberal crop of fruit after one or two applications of this fertilizer. We do not recommend applying the Ammoniated Die Back more than twice, except in rare cases.

If for any reason a grower should require a fertilizer different from those given above, we will be glad to hear from him and will make a special fertilizer to suit his requirements. In this connection, remember that our Mr. Painter has had over thirty years' experience in orange growing in Florida, and this experience is at the service of our customers. It has repeatedly happened that acting on the advice of Mr. Painter an unproductive and unsatisfactory property has been turned into a paying and desirable grove. His advice is based on actual experience, and not hearsay or guesswork.

(Standard mixtures and formulas continued on page 24.)

3rd Month

MARCH, 1909

31 Days

WEATHER FORECASTS

1 to 2, cold period; north winds in Cuba;
3 to 4, storm period, severe winds; 5 to 6,
colder, winds slight to northwest; 7 to 12,
cold wave; frosts in north Florida; 13 to
15, warmer; storm period; 16 to 18, colder,

chilling winds; 19 to 22, milder; cloudy in
Cuba; rain in Florida; 23 to 26, cold wave;
north winds in Cuba; 27 to 29, storm pe-
riod; cold rains; 30 to 31, mild and beau-
tiful.

Summary

Rainfall in Florida less than the average;
temperature below, both Florida and Cuba.

MOON'S PHASES Day Eastern Time—Cuba Day Central Time—Florida

☾ Full Moon.....	6th.....	9 h. 56 m. Eve....	6th.....	8 h. 56 m. Eve.
☾ Last Quarter.....	14th.....	10 h. 41 m. Eve....	14th.....	9 h. 41 m. Eve.
☾ New Moon.....	21st.....	3 h. 11 m. Eve....	21st.....	2 h. 11 m. Eve.
☾ First Quarter.....	28th.....	11 h. 48 m. Morn..	28th.....	10 h. 48 m. Morn..

Day of Month	Day of Week	Moon's Place at 7 p. m.	Sun ^u at Noon Mark	Moon in Meridian (South)	High Water Key West [*] (See Table)	FLORIDA			CUBA		
						Sun Rises	Sun Sets	Moon Sets and Rises	Sun Rises	Sun Sets	Moon Rises and Sets
		Con. Deg.	H.	EVE.	MORN.	H. M.	H.	MORN.	H. M.	H. M.	MORN.
1	Monday..	♌ 14	12 13	8 30	5 41	6 26	6 00	2 54	6 20	6 04	2 35
2	Tuesday..	♌ 27	12 12	9 22	6 37	6 25	6 00	3 46	6 19	6 04	3 27
3	Wedn'day	♍ 9	12 12	10 11	7 17	6 23	6 01	4 34	6 18	6 05	4 16
4	Thursday..	♍ 21	12 12	10 57	7 53	6 22	6 02	5 16	6 17	6 06	5 00
5	Friday...	♍ 3	12 12	11 41	8 25	6 21	6 03	5 53	6 16	6 06	5 40
6	Saturday..	♍ 14	12 11	Morn.	8 53	6 20	6 04	Rises Ev	6 15	6 07	Rises Ev
7	Sunday...	♍ 26	12 11	24	9 20	6 19	6 04	6 38	6 14	6 07	6 43
8	Monday..	♎ 8	12 11	1 05	9 39	6 18	6 05	7 30	6 13	6 07	7 30
9	Tuesday..	♎ 20	12 11	1 45	10 00	6 16	6 06	8 23	6 12	6 08	8 20
10	Wedn'day	♎ 2	12 10	2 26	10 18	6 15	6 06	9 16	6 11	6 08	9 10
11	Thursday..	♎ 14	12 10	3 07	10 44	6 14	6 07	10 12	6 11	6 09	10 01
12	Friday...	♎ 27	12 10	3 51	11 05	6 13	6 08	11 10	6 10	6 10	10 56
13	Saturday..	♎ 9	12 10	4 38	11 41	6 12	6 08	Morn.	6 09	6 10	11 52
14	Sunday...	♏ 22	12 09	5 28	Ev. 33	6 10	6 09	9	6 08	6 10	Morn.
15	Monday..	♏ 5	12 09	6 22	1 57	6 09	6 10	1 10	6 07	6 11	51
16	Tuesday..	♏ 19	12 09	7 20	3 33	6 08	6 10	2 11	6 06	6 11	1 52
17	Wedn'day	♏ 3	12 09	8 19	4 56	6 07	6 11	3 08	6 05	6 11	2 51
18	Thursday..	♏ 17	12 08	9 19	6 03	6 06	6 11	4 01	6 05	6 11	3 45
19	Friday...	♏ 2	12 08	10 18	7 00	6 05	6 12	4 49	6 04	6 12	4 36
20	Saturday..	♏ 18	12 08	11 14	7 52	6 03	6 13	5 32	6 03	6 13	5 22
21	Sunday...	♏ 3	12 07	Ev. 9	8 42	6 02	6 13	Sets Ev.	6 02	6 13	Sets Ev.
22	Monday..	♏ 18	12 07	1 02	9 32	6 01	6 14	7 22	6 01	6 13	7 20
23	Tuesday..	♏ 3	12 07	1 55	10 23	6 00	6 15	8 30	6 00	6 14	8 23
24	Wedn'day	♏ 18	12 06	2 48	11 16	5 59	6 16	9 38	5 59	6 14	9 27
25	Thursday..	♏ 2	12 06	3 42	Morn.	5 58	6 16	10 44	5 58	6 14	10 30
26	Friday...	♏ 15	12 06	4 36	16	5 57	6 17	11 47	5 57	6 15	11 29
27	Saturday..	♏ 28	12 06	5 31	1 22	5 55	6 17	Morn.	5 56	6 15	Morn.
28	Sunday...	♏ 11	12 05	6 25	2 40	5 54	6 18	47	5 55	6 15	28
29	Monday..	♏ 24	12 05	7 18	4 04	5 53	6 18	1 42	5 54	6 15	1 23
30	Tuesday..	♏ 6	12 05	8 08	5 18	5 51	6 19	2 32	5 53	6 16	2 13
31	Wedn'day	♏ 18	12 04	8 55	6 08	5 50	6 19	3 16	5 52	6 16	2 59

*This High Water is the first one that follows the Moon's meridian passage. To obtain all the other tides of the day and for all the ports or sea-side places of Florida and Cuba see the Explanatory Note accompanying the Tide Table on page 2.

Peaches and Pecans.

GEM PEACH TREE.

Price Per Ton, \$34.00.

GUARANTEED ANALYSIS.

Ammonia	4 per cent.
Potash (K 2O), water soluble..	6 per cent.
Available Phosphoric Acid....	5 per cent.

Made from Sulphate of Ammonia, Nitrate of Soda, Blood and Bone, Sulphate of Potash and Acid Phosphate.

In Florida the peach tree attains in one year the size that would require two or three years in the northern latitudes. Where properly planted, cared for and fertilized, orchards can be put out and the second year get a crop of fruit. Our peach Tree Special is giving excellent results and will do its part toward making a fine orchard if the grower will do his.

GEM PECAN.

Price Per Ton, \$30.00.

GUARANTEED ANALYSIS.

Ammonia	2½ per cent
Potash (K 2O), water soluble..	3 per cent
Available Phosphoric Acid....	9 per cent

Made from Blood and Bone, Raw Bone, Kainit and Acid Phosphate.

The culture of pecans is attracting considerable attention in some sections of Florida. It is customary in many cases to grow crops of annuals in the pecan groves. In this case it is necessary, of course, to apply a larger quantity of fertilizer to meet the demand of the growing trees. Our Gem Pecan fertilizer is a well-balanced mixture and has given satisfactory results.

PINEAPPLES.

The Pineapple grower has changed his views regarding the best method of fertilizing his plant very materially in the last few years. Instead of a low grade, cheap fertilizer, they are now demanding a high grade, high-priced fertilizer, as they find they get the most plant food for their money in the higher grade brands. We not only have brands of high grade, but are also prepared to make special formulas to suit. We were the first dealers in the United States to offer this advantage to the growers; and the fact that the Pineapple growers of Florida can today buy any kind of fertilizer material they require, is due entirely to our efforts, commenced eighteen years ago, to give the Florida grower the best fertilizer for his crops that his own experience and ours could devise.

(Standard mixtures and formulas continued on page 26.)

SIMON PURE PINEAPPLE FRUITER No. 1.

Price Per Ton, \$50.00.

GUARANTEED ANALYSIS.

Ammonia	7 per cent.
Potash (K 2O).....	10 per cent.
Phosphoric Acid	4½ per cent.

This fertilizer is made from Steamed Bone, Tobacco Dust, Sulphate Potash and Dried Blood.

The conditions under which the pineapple field is placed by the climatical changes make it necessary to change the fertilizer to meet the conditions. When an old field is suffering from frost or storm, or has been neglected, it is necessary to apply a fertilizer high in Ammonia and Potash to bring it out in fruiting conditions. Our Fruiter No. 1 is high in Ammonia and Potash.

SIMON PURE PINEAPPLE FRUITER No. 2.

Price Per Ton, \$42.00.

GUARANTEED ANALYSIS.

Ammonia	5 per cent.
Potash (K 2O).....	5 per cent.
Phosphoric Acid	7 per cent.

This fertilizer is made from Steamed Bone, Tobacco Dust, Sulphate of Potash and Blood and Bone.

Fruiter No. 2 is similar to No. 1, but is lower in Ammonia and Potash and is intended for fields that are in good condition and want to be kept so.

GEM PINEAPPLE MANURE.

Price Per Ton, \$33.

GUARANTEED ANALYSIS.

Ammonia	5 per cent.
Potash (K 2O).....	6 per cent.
Phosphoric Acid	2½ per cent.

Made from Blood, Bone, Castor Pomace, Sulphate Potash and Cotton Seed Meal.

The addition of Castor Pomace is valuable not only as a fertilizer, but will drive out the moles that do much damage by burrowing and cutting the roots. It will make good, strong, healthy plants that will bear large and well-developed fruit. No single brand of pineapple fertilizer has a sale equal to our Gem, and increasing every year.

GEM HIGH GRADE BLOOD, BONE AND POTASH.

Price Per Ton, \$44.00.

GUARANTEED ANALYSIS.

Ammonia	7 per cent
Potash Actual	10 per cent
Phosphoric Acid	4½ per cent

This brand is made from high-grade Blood and Bone and high-grade Sulphate Potash. It therefore carries a very high per cent. of plant food.

4th Month

APRIL, 1909

30 Days

WEATHER FORECASTS

1 to 2, mild, cloudy, southerly winds; 3 to 5, storm period; high winds; 6 to 8, cool period; northerly winds; 9 to 12, storm period, severe in south Florida; 13 to 15, continued stormy weather in north Flor-

ida; 16 to 18, fair and mild; 19 to 21, threatening; thunder storms; 22 to 24, brisk gales; clear in Cuba; 25 to 27, storm period, thunder storms; 28 to 30, cool period, northerly winds.

Summary } Florida: rainfall less than the average; temperature lower.
Cuba: rainfall very slight; 5 cloudy days; more than average.

MOON'S PHASES Day Eastern Time—Cuba Day Central Time—Florida

☾ Full Moon..... 5th.... 3 h. 28 m. Eve.... 5th..... 2 h. 27 m. Eve.
☾ Last Quarter13th.... 9 h. 30 m. Morn..13th..... 8 h. 30 m. Morn
☾ New Moon.....19th....11 h. 51 m. Eve....19th.....10 h. 51 m. Eve.
☾ First Quarter.....27th.... 3 h. 36 m. Morn..27th..... 2 h. 36 m. Morn

Day of Month	Day of Week	Moon's Place at 7 P. M.	Sun at Noon Mark	Moon in Meridian (South)	High Water Key West (See table)	FLORIDA			CUBA		
						Sun Rises	Sun Sets	Moon Sets and Rises	Sun Rises	Sun Sets	Moon Sets and Rises
		Con. Deg.	H. M.	EVE.	MORN.	H. M.	H. M.	MORN.	H. M.	H. M.	MORN.
1	Thursday.	☾ 30	12 04	9 40	6 44	5 49	6 20	3 55	5 51	6 16	3 41
2	Friday ...	☾ 11	12 04	10 22	7 16	5 48	6 21	4 29	5 50	6 16	4 18
3	Saturday.	☾ 23	12 03	11 04	7 44	5 47	6 22	4 59	5 49	6 17	4 51
4	Sunday...	☾ 5	12 03	11 44	8 07	5 46	6 22	5 30	5 48	6 17	5 26
5	Monday..	☾ 17	12 03	Morn.	8 27	5 44	6 23	Rise Ev.	5 47	6 17	Rise Ev.
6	Tuesday..	☾ 29	12 03	25	8 48	5 43	6 23	7 11	5 46	6 17	7 06
7	Wedn'day	☾ 11	12 02	1 06	9 08	5 42	6 24	8 07	5 46	6 18	7 57
8	Thursday.	☾ 24	12 02	1 50	9 30	5 41	6 24	9 05	5 45	6 18	8 52
9	Friday ...	☾ 6	12 02	2 36	9 53	5 40	6 25	10 04	5 44	6 18	9 49
10	Saturday.	☾ 19	12 01	3 25	10 26	5 38	6 25	11 03	5 43	6 19	10 44
11	Sunday...	☾ 2	12 01	4 17	11 06	5 37	6 26	Morn.	5 42	6 19	11 44
12	Monday..	☾ 15	12 01	5 12	Ev. 4	5 36	6 26	3	5 41	6 20	Morn.
13	Tuesday..	☾ 28	12 01	6 10	1 33	5 35	6 27	1 01	5 40	6 20	43
14	Wedn'day	☾ 12	12 00	7 07	3 21	5 34	6 27	1 53	5 39	6 21	1 35
15	Thursday.	☾ 27	12 00	8 04	4 49	5 32	6 28	2 41	5 39	6 21	2 36
16	Friday ...	☾ 11	12 00	9 00	5 56	5 31	6 29	3 25	5 38	6 22	3 13
17	Saturday.	☾ 26	12 00	9 54	6 53	5 30	6 30	4 05	5 37	6 22	3 58
18	Sunday...	☾ 11	11 59	10 46	7 47	5 29	6 30	4 41	5 36	6 22	4 38
19	Monday..	☾ 26	11 59	11 39	8 36	5 28	6 31	5 19	5 35	1 23	5 21
20	Tuesday..	☾ 11	11 59	Ev. 32	9 27	5 27	6 31	Sets Ev.	5 34	6 23	Sets Ev.
21	Wedn'day	☾ 26	11 59	1 26	10 15	5 26	6 32	8 23	5 33	6 23	8 10
22	Thursday.	☾ 7	11 58	2 22	11 06	5 25	6 33	9 30	5 33	6 23	9 13
23	Friday ...	☾ 24	11 58	3 18	Morn.	5 24	6 34	10 35	5 32	6 24	10 16
24	Saturday.	☾ 7	11 58	4 15	3	5 23	6 35	11 33	5 31	6 24	11 13
25	Sunday...	☾ 20	11 58	5 09	1 07	5 22	6 35	Morn.	5 30	6 25	Morn.
26	Monday..	☾ 2	11 58	6 02	2 19	5 21	6 36	25	5 29	6 26	6
27	Tuesday..	☾ 14	11 58	6 51	3 33	5 20	6 36	1 14	5 29	6 26	57
28	Wedn'day	☾ 26	11 57	7 37	4 38	5 19	6 37	2 09	5 28	6 26	1 55
29	Thursday.	☾ 8	11 57	8 20	5 27	5 18	6 37	2 31	5 28	6 26	2 19
30	Friday ...	☾ 20	11 57	9 02	6 00	5 17	6 38	3 02	5 27	6 27	2 54

*This High Water is the first one that follows the Moon's meridian passage. To obtain all the other tides of the day and for all the ports or sea-side places of Florida and Cuba see the Explanatory Note accompanying the Tide Table on page 2.

GEM BLOOD, BONE AND POTASH.

Price Per Ton, \$34.

GUARANTEED ANALYSIS.

Ammonia	4½ per cent
Potash (K 2O).....	6½ per cent
Phosphoric Acid	6 per cent

Made from Blood and Bone and Sulphate Potash.

We will make special mixtures for anyone who will furnish the formula or tell us the percentage of ammonia and potash they wish their fertilizer to contain. Careful attention is given to this part of the business, as we know that a good farmer or grower should be the best judge of what his soil and crop need.

PINEAPPLE FORMULA "A."

Price Per Ton, \$27.00.

GUARANTEED ANALYSIS.

Ammonia	5 per cent
Potash (K 2O), water soluble..	1 per cent
Phosphoric Acid	1 per cent

This fertilizer is made from equal parts Bright Cottonseed Meal and Tobacco Dust.

After the pineapple plants have been set out and commenced to grow they need budding and fertilizing. Our Formula A answers for this purpose.

PINEAPPLE FORMULA "B."

Price Per Ton, \$30.00.

GUARANTEED ANALYSIS.

Ammonia	4½ per cent
Potash (K 2O), water soluble..	5 per cent
Phosphoric Acid	1 per cent

This fertilizer is made from Bright Cottonseed Meal, Tobacco Dust and H. G. Sulphate of Potash.

After the pineapple plants have made considerable growth they need a fertilizer containing considerable more Potash than for the first application. Our Formula B gives to the plants the quantity needed.

HOME AND MARKET GARDENS.**GEM BEAN.**

Price Per Ton, \$30.

GUARANTEED ANALYSIS.

Ammonia	5 per cent
Potash Actual	3 per cent
Available Phosphoric Acid.....	5 per cent

Made from Blood, Bone, Kainit and Acid Phosphate.

The average grower has the idea that the bean does not want anything but Phosphoric Acid and a little Potash. Our personal experience in raising beans is to the effect that no garden vegetable responds more quickly to a liberal application of Ammonia than the bean, and we have nearly reversed the formula for our bean fertilizer, giving a large percentage of Ammonia and small Potash. Those who have used our Bean Special speak of it in the most glowing terms. Remember, this formula is based on actual tests.

GEM CABBAGE.

Price Per Ton, \$34.00.

GUARANTEED ANALYSIS.

Ammonia	5 per cent
Potash Actual	5 per cent
Available Phosphoric Acid.....	6 per cent

Made from Blood, Bone, Nitrate Soda, Muriate Potash and Acid Phosphate.

The cabbage is a good feeder. The more you feed and work the soil, the better will

it grow. The cabbage is not a dry land plant, but many a crop of cabbage is carried through a dry season by proper fertilizing and constant cultivation.

GEM CELERY SPECIAL.

Price Per Ton, \$46.00.

GUARANTEED ANALYSIS.

Ammonia	7 per cent
Potash (K 2O).....	10 per cent
Available Phosphoric Acid.....	5 per cent

Made from Sulphate of Ammonia, Dried Blood, Nitrate Soda, Muriate Potash and Acid Phosphate.

There is probably no plant that requires as much fertilizer to the acre as celery, and but few give as great a yield when properly cared for and fertilized. To give it the growing qualities it requires to be rich in Ammonia, and to give the fertilizer carrying qualities it should be rich in Potash. We give both of these requirements in our Celery Special.

SANFORD CELERY SPECIAL.

Price Per Ton, \$40.00.

GUARANTEED ANALYSIS.

Ammonia, Actual and Potential	6 per cent
Potash (K 2O), water soluble	8 per cent
Phosphoric Acid	6 per cent

This fertilizer is made from Blood and

5th Month

MAY, 1909

31 Days

WEATHER FORECASTS

1 to 2, fair and warmer; 3 to 4, cloudy and sultry; 5 to 9, storm period; high winds and violent electrical storms; 10 to 12, cool; light clouds in Cuba; 13 to 15, warmer; hot period; 16 to

18, storm period; terrific winds; 19 to 20, cooler; cloudy in Cuba; 21 to 22, warmer; southerly winds; 22 to 25, fair and delightful; 26 to 29, storm period; rain; 30 to 31, cool, cloudy; threatening in Cuba.

Summary { Florida: rainfall less than the average; temperature lower.
Cuba: rainfall more than the average; temperature about the average.

MOON'S PHASES Day Eastern Time—Cuba Day Central Time—Florida

☾ Full Moon.....	5th.....	7 h. 7 m.	Morn....	5th.....	6 h. 7 m.	Morn.
☾ Last Quarter.....	12th.....	4 h. 45 m.	Eve....	12th.....	3 h. 45 m.	Eve.
☾ New Moon.....	19th.....	8 h. 42 m.	Morn....	19th.....	7 h. 42 m.	Morn.
☾ First Quarter.....	26th.....	9 h. 28 m.	Eve....	26th.....	8 h. 28 m.	Eve.

Day of Week	Day of Month	Moon's Place at 7 P. M.	Sun at Noon Mark	Moon in Meridian (South)	High Water Key West* (See table)	FLORIDA			CUBA		
						Sun Rises	Sun Sets	Moon Sets and Rises	Sun Rises	Sun Sets	Moon Sets and Rises
		Con. Deg.	H. M.	EVE.	MORN.	H. M.	H. M.	MORN.	H. M.	H. M.	MORN.
1	Saturday.	♊ 2	11 57	9 42	6 28	5 16	6 38	3 32	5 27	6 27	3 27
2	Sunday...	♊ 14	11 57	10 23	6 52	5 15	6 39	4 00	5 26	6 27	3 58
3	Monday..	♊ 26	11 57	11 04	7 16	5 15	6 40	4 28	5 25	6 28	4 30
4	Tuesday..	♋ 8	11 57	11 47	7 40	5 14	6 40	4 57	5 25	6 28	5 03
5	Wedn'day	♋ 20	11 57	Morn.	8 03	5 13	6 41	Rise Ev.	5 24	6 29	Rise Ev.
6	Thursday.	♋ 3	11 57	33	8 28	5 12	6 42	7 47	5 24	6 29	7 33
7	Friday...	♋ 16	11 56	1 21	8 56	5 11	6 42	8 58	5 23	6 30	8 40
8	Saturday.	♋ 29	11 56	2 13	9 28	5 10	6 43	9 59	5 22	6 30	9 40
9	Sunday...	♌ 12	11 56	3 08	10 06	5 09	6 44	10 57	5 21	6 31	10 37
10	Monday..	♌ 25	11 56	4 05	10 52	5 08	6 44	11 51	5 21	6 31	11 41
11	Tuesday..	♌ 9	11 56	5 02	Eve.	5 08	6 45	Morn.	5 20	6 31	Morn.
12	Wedn'day	♌ 23	11 56	5 58	1 33	5 07	6 45	39	5 20	6 32	23
13	Thursday.	♍ 7	11 56	6 53	3 14	5 06	6 46	1 23	5 20	6 32	1 10
14	Friday...	♍ 21	11 56	7 45	4 39	5 06	6 47	2 02	5 19	6 33	1 54
15	Saturday.	♍ 6	11 56	8 37	5 49	5 05	6 48	2 39	5 19	6 33	2 34
16	Sunday...	♍ 21	11 56	9 27	6 50	5 05	6 48	3 14	5 19	6 34	3 14
17	Monday..	♎ 5	11 56	10 18	7 40	5 04	6 49	3 49	5 19	6 34	3 54
18	Tuesday..	♎ 20	11 56	11 11	8 28	5 03	6 50	4 29	5 18	6 34	4 36
19	Wedn'day	♎ 4	11 56	Eve. 6	9 15	5 03	6 51	Sets Ev.	5 18	6 34	Sets Ev
20	Thursday.	♎ 18	11 56	1 02	10 03	5 02	6 51	8 14	5 18	6 34	7 56
21	Friday...	♎ 2	11 56	2 00	10 54	5 02	6 52	9 17	5 18	6 35	8 57
22	Saturday.	♎ 15	11 56	2 57	11 48	5 01	6 53	10 15	5 17	6 35	9 55
23	Sunday...	♎ 28	11 57	3 51	Morn.	5 01	6 53	11 05	5 17	6 36	10 46
24	Monday..	♏ 10	11 57	4 43	45	5 00	6 54	11 51	5 17	6 37	11 34
25	Tuesday..	♏ 22	11 57	5 31	1 47	5 00	6 54	Morn.	5 17	6 37	Morn.
26	Wedn'day	♏ 4	11 57	6 16	2 48	5 00	6 55	29	5 16	6 38	16
27	Thursday.	♏ 16	11 57	6 59	3 45	5 00	6 55	1 03	5 16	6 38	53
28	Friday...	♏ 28	11 57	7 39	4 28	4 59	6 56	1 34	5 16	6 39	1 27
29	Saturday.	♏ 10	11 57	8 20	5 03	4 59	6 56	2 01	5 16	6 39	1 58
30	Sunday...	♏ 22	11 57	9 00	5 33	4 59	6 57	2 31	5 16	6 39	2 32
31	Monday..	♏ 4	11 57	9 42	6 02	4 59	6 57	2 58	5 16	6 40	3 03

*This High Water is the first one that follows the Moon's meridian passage. To obtain all the other tides of the day and for all the ports or sea-side places of Florida and Cuba see the Explanatory Note accompanying the Tide Table on page 2.

Bone, Steamed Bone and Sulphate of Potash.

This formula has given entire satisfaction and is used and approved by the most successful celery growers of Sanford celery district; in fact, the formula was worked up by one of Sanford's most successful celery growers.

GEM CUCUMBER.

Price Per Ton, \$38.00.

GUARANTEED ANALYSIS.

Ammonia	6½ per cent
Potash Actual	5 per cent
Available Phosphoric Acid.....	5 per cent

Made from Muriate of Potash, Blood and Bone, Nitrate of Soda, and Acid Phosphate.

The cucumber, like the alderman, loves plenty of "good things" to eat. For best results it must not be stinted in Ammonia or moisture, and for shipping needs a fair percentage of Potash. It is frequently the case that a grower will make a fine crop of cucumbers, but just when his crop is about ready to pick, the vines will be covered with insects, and ruin will stare him in the face.

One of the best insecticides to apply to the cucumber vine is Arsenate of Lead. This comes put up in one-pound (22c) or 5 and 10-pounds pails (20c) per pound. Dissolve this Arsenate of Lead at the rate of one pound to 40 gallons of water, and spray the vines. This will kill all insects that eat the vines and not hurt the most delicate foliage. For Hessian flies or insects that suck, use Black Leaf Extract. This is a nicotine extract from tobacco and is applied by diluting in water. (See Insecticide list.)

SIMON PURE EGG PLANT.

Price Per Ton, \$42.00.

GUARANTEED ANALYSIS.

Ammonia	5 per cent
Potash (K ₂ O).....	9 per cent
Available Phosphoric Acid.....	4 per cent

Made from Sulphate of Ammonia, Nitrate of Soda, Blood and Bone, Bone Black, Muriate and Sulphate of Potash.

The egg plant has grown in favor each year, and where formerly only a few carloads were shipped almost train loads are now going out. The egg plant is a gross producer—consequently a heavy feeder and needs plenty of available fertilizer, high in Ammonia for making growth, and rich in Potash for carrying qualities. Our Egg Plant Special has the record of having produced the largest crop (1,300 crates on one acre) of any fertilizer manufactured or sold in the State.

Every egg plant grower should have a supply of Bordeaux Mixture always on hand, so that at the first appearance of rust or blight it can be applied. Often a whole field is lost waiting for the materials to arrive. In the case of egg plants, the adage "An ounce of preventative is worth a pound of cure" applies more than "aptly."

SIMON PURE GARDEN.

Price Per Ton, \$42.00.

GUARANTEED ANALYSIS.

Ammonia	5 per cent
Potash Actual	6½ per cent
Available Phosphoric Acid.....	5 per cent

Made from Sulphate Ammonia, Nitrate of Soda, Sulphate of Potash, Blood and Bone, and dissolved Bone Black.

We have a good many customers who do not raise garden truck for sale, but want a garden of their own. They do not want as much as a sack of any special brand, hence want a general fertilizer. This we have in our Garden. One that will grow anything in garden, or can be used on pot plants or shrubbery.

GEM LETTUCE.

Price Per Ton, \$32.00.

GUARANTEED ANALYSIS.

Ammonia	5 per cent
Potash Actual	3 per cent
Available Phosphoric Acid.....	5 per cent

Made from Blood, Bone, Nitrate Soda, Kainit and Acid Phosphate.

Lettuce to be salable must be grown quickly and be crisp. This requires plenty of Ammonia and cultivation with a proper amount of Potash and Phosphoric Acid. Our Gem Lettuce furnishes the necessary plant food, but the grower must apply the cultivation.

SIMON PURE TOMATO.

Price Per Ton, \$42.00.

GUARANTEED ANALYSIS.

Ammonia	5 per cent
Potash Actual	9 per cent
Phosphoric Acid Available.....	4 per cent

Made from Sulphate Ammonia, Nitrate of Soda, Blood and Bone, Dissolved Bone Black and Muriate and Sulphate Potash.

We claim to have made more actual field experiments to get the best combination and right proportions of materials for our fertilizers than any firm in the state. We grew three crops of tomatoes with our "Tomato Special" before we offered it for sale and then planted thirty acres to demonstrate its merits in field culture. Our tomatoes were pronounced by one of the

6th Month

JUNE, 1909

30 Days

WEATHER FORECASTS

1 to 2, warm period; 3 to 5, storm period, gales; violent electrical storms; 6 to 8, milder, cloudy; 9 to 12, storm period; furious winds; 13 to 15, sultry, very oppressive; 16 to 18, hurricane period; 19 to 20,

cooler and fair; 21 to 23, brisk local storms; rain; 24 to 26, electrical storm; wind; 27 to 30, fine showers in eastern Cuba and Porto Rico.

Summary } Florida: rainfall slightly less than the average; thermometer higher.
Cuba: rainfall much more than the average; thermometer higher.

	MOON'S PHASES	Day	Eastern Time—Cuba	Day	Central Time—Florida
☾	Full Moon.....	3rd.....	8 h. 24 m. Eve..	3rd.....	7 h. 24 m. Eve.
☾	Last Quarter.....	10th.....	9 h. 42 m. Eve..	10th.....	8 h. 42 m. Eve.
☾	New Moon	17th.....	6 h. 28 m. Eve..	17th.....	5 h. 28 m. Eve.
☾	First Quarter.....	25th	1 h. 43 m. Eve..	25th.....	0 h. 43 m. Eve.

Day of Month	Day of Week	Moon's Place at 7 P. M.	Sun at Noon Mark	Moon in Meridian (South)	High Water Key West* (See Table)	FLORIDA			CUBA		
						Sun Rises	Sun Sets	Moon Sets and Rises	Sun Rises	Sun Sets	Moon Sets and
		Con. Deg.	H. M.	EVE.	MORN.	H. M.	H. M.	MORN.	H. M.	H. M.	MORN.
1	Tuesday..	♊ 17	11 58	10 27	6 28	4 59	6 57	3 28	5 15	6 40	3 36
2	Wednesday..	♊ 29	11 58	11 15	6 59	4 59	6 57	4 01	5 15	6 41	4 14
3	Thursday..	♊ 12	11 58	Morn.	7 28	4 58	6 58	Rise Ev.	5 15	6 41	Rise Ev.
4	Friday....	♊ 25	11 58	06	8 01	4 58	6 58	7 50	5 15	6 42	7 31
5	Saturday..	♊ 8	11 58	1 01	8 38	4 58	6 59	8 52	5 15	6 42	8 32
6	Sunday...	♊ 22	11 58	1 59	9 20	4 58	6 59	9 47	5 15	6 43	9 28
7	Monday...	♊ 6	11 59	2 57	10 06	4 58	7 00	10 39	5 15	6 43	10 21
8	Tuesday..	♊ 20	11 59	3 55	11 00	4 58	7 00	11 24	5 15	6 43	11 09
9	Wednesday..	♊ 4	11 59	4 50	Ev. 10	4 58	7 01	Morn.	5 15	6 44	11 52
10	Thursday..	♊ 18	11 59	5 42	1 32	4 58	7 01	3	5 15	6 44	Morn.
11	Friday...	♊ 2	11 59	6 33	3 01	4 58	7 02	41	5 15	6 45	35
12	Saturday..	♊ 16	12 00	7 22	4 30	4 58	7 02	1 14	5 16	6 45	1 11
13	Sunday...	♊ 1	12 00	8 12	5 43	4 58	7 03	1 50	5 16	6 45	1 53
14	Monday...	♊ 15	12 00	9 02	6 39	4 58	7 03	2 25	5 16	6 46	2 32
15	Tuesday..	♊ 29	12 00	9 54	7 31	4 58	7 03	3 02	5 16	6 46	3 14
16	Wednesday..	♊ 13	12 00	10 49	8 20	4 58	7 04	3 45	5 16	6 46	3 59
17	Thursday..	♊ 26	12 01	11 45	9 07	4 58	7 04	4 32	5 16	6 46	4 51
18	Friday...	♊ 10	12 01	Ev. 43	9 52	4 58	7 04	Sets Ev.	5 16	6 47	Sets Ev.
19	Saturday..	♊ 23	12 01	1 39	10 38	4 58	7 04	8 55	5 17	6 47	8 36
20	Sunday...	♊ 6	12 01	2 33	11 25	4 58	7 05	9 44	5 17	6 47	9 26
21	Monday...	♊ 18	12 01	3 23	Morn.	4 59	7 05	10 25	5 17	6 47	10 10
22	Tuesday..	♊ 0	12 02	4 10	14	4 59	7 05	11 02	5 17	6 47	10 50
23	Wednesday..	♊ 12	12 02	4 54	1 03	4 59	7 05	11 34	5 17	6 47	11 25
24	Thursday..	♊ 24	12 02	5 35	1 49	4 59	7 05	Morn.	5 17	6 47	11 57
25	Friday...	♊ 6	12 02	6 16	2 35	5 00	7 05	2	5 18	6 48	Morn.
26	Saturday..	♊ 18	12 03	6 56	3 17	5 00	7 06	31	5 18	6 48	30
27	Sunday...	♊ 0	12 03	7 37	3 58	5 00	7 06	59	5 19	6 48	1 02
28	Monday...	♊ 12	12 03	8 20	4 35	5 01	7 06	1 28	5 19	6 48	1 35
29	Tuesday..	♊ 25	12 03	9 06	5 10	5 01	7 06	1 58	5 19	6 48	2 08
30	Wednesday..	♊ 7	12 03	9 56	5 46	5 01	7 06	2 34	5 20	6 48	2 47

*This High Water is the first one that follows the Moon's meridian passage. To obtain all the other tides of the day and for all the ports or sea-side places of Florida and Cuba see the Explanatory Note accompanying the Tide Table on page 2.

best hotel men in the state to be the finest and best that he had ever seen; that they were firm and remained in perfect condition longer than any others received. We have found that our tomato fertilizer is unexcelled for all garden truck like cabbage, lettuce, egg plants, or anything that the growth wanted is above the ground.

GEM MUCK LAND TOMATO No. 1.

Price Per Ton, \$28.00.

GUARANTEED ANALYSIS.

Ammonia	2 per cent
Potash (K ₂ O), water soluble..	5 per cent
Available Phosphoric Acid.....	11 per cent

This fertilizer is made from Sulphate of Ammonia, Sulphate of Potash and Acid Phosphate.

Muck Land No. 1 is for application before planting time, and should be put on at least a week or ten days before the plants are set out. It is a good plan, in setting out tomatoes on muck land, to use a little stable manure in the hole. This manure starts the bacteria to work which is usually killed by Humic Acid that accumulates in muck soils. It is frequently necessary and essential for good results to apply Hard Wood Ashes in liberal quantities when the land is first cleared, in order to neutralize the Humic Acid.

GEM MUCK LAND TOMATO No. 2.

Price Per Ton, \$30.00.

GUARANTEED ANALYSIS.

Ammonia	3½ per cent
Potash (K ₂ O), water soluble	5 per cent
Available Phosphoric Acid	9 per cent

This fertilizer is made from Sulphate of Ammonia, Sulphate of Potash, Blood, Bone and Acid Phosphate.

GEM MUCK LAND TOMATO No. 3.

Price Per Ton, \$37.00.

GUARANTEED ANALYSIS.

Ammonia	3 per cent
Potash (K ₂ O), water soluble..	14 per cent
Available Phosphoric Acid.....	7 per cent

Made from Sulphate of Ammonia, Sulphate of Potash, Blood, Bone and Acid Phosphate.

Muck Land No. 3 is high in Potash and is usually applied just before the blooming time or during the last working of the plants.

GEM ONION SPECIAL.

Price Per Ton, \$42.00.

GUARANTEED ANALYSIS.

Ammonia	6 per cent
Potash (K ₂ O)	10 per cent
Available Phosphoric Acid.....	5 per cent

(Standard mixtures and formulas continued on page 32.)

Made from Blood and Bone, Nitrate of Soda, Muriate and Acid Phosphate.

The onion is a good paying crop on the proper kind of land. The onion requires considerable moisture during the growing season, but to mature properly during our spring months, the patch should be located so the water can be kept from the onions, hence an irrigated field is the best, then all the water necessary can be given when needed and entirely shut off when the crop is ready to mature. In this way the crop can be advanced from two to three weeks.

GEM VEGETABLE.

Price Per Ton, \$34.00.

GUARANTEED ANALYSIS.

Ammonia	4 per cent
Potash (K ₂ O).....	6 per cent
Available Phosphoric Acid.....	5 per cent

Made from Sulphate Ammonia, Nitrate Soda, Blood, Bone, Sulphate Potash and Acid Phosphate.

For growing all kinds of vegetables for the market where earliness and thriftiness are wanted, this brand will give the desired results.

GEM STRAWBERRY.

Price Per Ton, \$34.00.

GUARANTEED ANALYSIS.

Ammonia	4 per cent
Potash Actual	8 per cent
Available Phosphoric Acid.....	6 per cent

Made from Blood, Bone, Sulphate Potash, Nitrate Soda, Acid Phosphate.

Who does not like a luscious strawberry? To grow them requires a fertilizer with a large proportion of soluble plant food, as the berries "come quick." Our Gem Strawberry meets the full requirement.

FARM CROPS.

GEM CORN FERTILIZER.

Price Per Ton, \$27.00.

GUARANTEED ANALYSIS.

Ammonia	3 per cent
Potash	4 per cent
Available Phosphoric Acid.....	5 per cent

Made from Nitrate Soda, Blood, Bone, Acid Phosphate and Kainit.

Corn is a gross feeder and can assimilate plant food that other plants would be a long time, if ever, taking up. Therefore, a much cheaper brand will answer for making a good crop of corn.

7th Month

JULY, 1909

31 Days

WEATHER FORECASTS

1 to 4, storm period; 5 to 6, fair and milder in Cuba; 7 to 8, occasional thunder storms and showers; 10 to 12, sultry; very threatening; 13 to 15, hurricane period; this period really covers 5 days, 19 to 15; watch out; 16 to 18, cooler; cloudy; possi-

ble showers 17th; 19 to 21, fair and delightful; 22 to 23, sultry; cloudy; threatening on 23rd; 24 to 25, severe local showers; 26 to 28, high winds and gusts of rain 28th; 29 to 31, stormy; violent thunder storms.

Summary } Florida: warmer than the average and an excess of rainfall.
 } Cuba: about average warmth and an excess of rainfall.

MOON'S PHASES		Day	Eastern Time—Cuba			Day	Central Time—Florida		
☾	Full Moon	.....	3rd	....	7 h. 17 m.	Morn	...3rd	.....	6 h. 17 m. Morn.
☾	Last Quarter	.....	10th	....	1 h. 58 m.	Morn	..10th	.....	0 h. 58 m. Morn.
☾	New Moon	.....	17th	....	5 h. 44 m.	Morn	...17th	.....	4 h. 44 m. Morn.
☾	First Quarter	.....	25th	....	6 h. 45 m.	Morn	...25th	.....	5 h. 45 m. Morn.

Day of Month	Day of Week	Moon's Place at 7 P. M.	Sun at Noon Mark	Moon in Meridian (South)	High Water Key West* (See Table)	FLORIDA			CUBA		
						Sun Rises	Sun Sets	Moon Sets and Rises	Sun Rises	Sun Sets	Moon Sets and Rises
		Con. Deg.	H. M.	EVE.	MORN.	H. M.	H. M.	MORN.	H. M.	H. M.	MORN.
1	Thursday	♊ 20	12 04	10 50	6 24	5 01	7 06	3 14	5 20	6 48	3 31
2	Friday	♊ 4	12 04	11 47	7 07	5 01	7 06	4 01	5 20	6 47	4 20
3	Saturday	♊ 18	12 04	Morn.	7 48	5 02	7 06	Rises Ev	5 21	6 47	Rises Ev
4	Sunday	♊ 2	12 04	47	8 32	5 02	7 05	8 35	5 21	6 47	8 16
5	Monday	♊ 16	12 04	1 46	9 22	5 03	7 05	9 20	5 21	6 46	9 06
6	Tuesday	♊ 0	12 04	2 43	10 11	5 03	7 05	10 03	5 22	6 46	9 51
7	Wedn'day	♊ 15	12 05	3 38	11 08	5 04	7 05	10 41	5 22	6 46	10 34
8	Thursday	♊ 29	12 05	4 30	Ev. 11	5 04	7 05	11 17	5 22	6 46	11 14
9	Friday	♊ 13	12 05	5 20	1 24	5 05	7 04	11 51	5 23	6 46	11 53
10	Saturday	♊ 27	12 05	6 09	2 51	5 06	7 04	Morn.	5 23	6 46	Morn.
11	Sunday	♊ 11	12 05	6 58	4 18	5 06	7 04	25	5 24	6 46	31
12	Monday	♊ 25	12 05	7 49	5 30	5 07	7 04	1 02	5 24	6 46	1 12
13	Tuesday	♊ 9	12 05	8 42	6 31	5 07	7 03	1 42	5 24	6 46	1 55
14	Wedn'day	♊ 22	12 06	9 36	7 25	5 08	7 03	2 26	5 25	6 46	2 44
15	Thursday	♊ 5	12 06	10 32	8 12	5 08	7 03	3 16	5 25	6 46	3 35
16	Friday	♊ 18	12 06	11 28	8 55	5 09	7 03	4 09	5 26	6 46	4 29
17	Saturday	♊ 1	12 06	Ev. 23	9 36	5 10	7 02	Sets Ev.	5 27	6 46	Sets Ev.
18	Sunday	♊ 14	12 06	1 15	10 15	5 10	7 02	8 21	5 27	6 46	8 05
19	Monday	♊ 26	12 06	2 03	10 54	5 11	7 02	8 59	5 27	6 46	8 46
20	Tuesday	♊ 8	12 06	2 48	11 32	5 11	7 01	9 32	5 28	6 45	9 22
21	Wedn'day	♊ 20	12 06	3 31	Morn.	5 12	7 00	10 03	5 28	6 45	9 57
22	Thursday	♊ 2	12 06	4 11	5	5 13	6 59	10 31	5 28	6 44	10 29
23	Friday	♊ 14	12 06	4 51	40	5 13	6 58	10 59	5 29	6 44	11 01
24	Saturday	♊ 26	12 06	5 32	1 16	5 14	6 58	11 28	5 29	6 43	11 33
25	Sunday	♊ 8	12 06	6 13	1 54	5 14	6 57	11 56	5 30	6 43	Morn.
26	Monday	♊ 20	12 06	6 57	2 37	5 15	6 57	Morn.	5 30	6 43	5
27	Tuesday	♊ 3	12 06	7 45	3 26	5 15	6 56	29	5 30	6 42	42
28	Wedn'day	♊ 15	12 06	8 36	4 18	5 16	6 56	1 07	5 31	6 42	1 23
29	Thursday	♊ 29	12 06	9 32	5 10	5 16	6 55	1 49	5 31	6 41	2 08
30	Friday	♊ 12	12 06	10 31	6 02	5 17	6 54	2 40	5 31	6 41	3 00
31	Saturday	♊ 26	12 06	11 31	6 51	5 18	6 53	3 39	5 32	6 40	3 59

*This High Water is the first one that follows the Moon's meridian passage. To obtain all the other tides of the day and for all the ports or sea-side places of Florida and Cuba see the Explanatory Note accompanying the Tide Table on page 2.

GEM COTTON.**Price Per Ton, \$25.00.****GUARANTEED ANALYSIS.**

Ammonia 2½ per cent
 Potash (K 2O)..... 3 per cent
 Available Phosphoric Acid..... 8 per cent
 Made from Blood and Bone, Kainit and Acid Phosphate.

The cotton grower makes a mistake in buying a fertilizer very low in Ammonia. One per cent. is only a starter, two per cent. is twice as good, but three is better. A bale to the acre from 1,000 pounds of fertilizer is better than half a bale from 200 pounds.

GEM COW PEA.**Price Per Ton, \$24.00.****GUARANTEED ANALYSIS.**

Ammonia 2½ per cent
 Potash (K 2O)..... 3½ per cent
 Available Phosphoric Acid.... 4 per cent

Made from Kainit, Acid Phosphate and Blood and Bone.

The cow pea is such a gross feeder that they have come to be looked on as a renovator of the soil, and that they do not need an application of fertilizer. However, where cow peas are planted for several seasons it is found that a little fertilizer is greatly appreciated and an increase in yields the result. Our Cow Pea Fertilizer is made to meet these requirements.

GEM SUGAR CANE.**Price Per Ton, \$28.00.****GUARANTEED ANALYSIS.**

Ammonia 3 per cent
 Potash Actual 5 per cent
 Available Phosphoric Acid..... 8 per cent

Made from Blood, Bone and Acid Phosphate and Sulphate Potash.

Sugar cane is a long time growing, hence does not require the higher grade of soluble ammoniates, but it must have the right kind of potash, or only syrup will be the result.

GEM OAT.**Price Per Ton, \$30.00.****GUARANTEED ANALYSIS.**

Ammonia 5 per cent
 Potash 4 per cent
 Available Phosphoric Acid.... 3 3-4 per cent

Made from Nitrate of Soda, Kainit, Acid Phosphate, Blood and Bone.

From actual experience we find that oats, while being a good forage, appreciate help in the way of Ammonia. After raising one or two crops with a fertilizer low in Ammonia we found that we did not get the

results wanted, but when we increased the Ammonia we got a fine yield of oats.

GEM POTATO MANURE.**Price Per Ton, \$34.00.****GUARANTEED ANALYSIS.**

Ammonia 4 per cent
 Potash (K 2O)..... 11 per cent
 Available Phosphoric Acid.... 4 per cent

Made from Sulphate Ammonia, Blood, Bone, Sulphate Potash and Acid Phosphate.

There is no potato fertilizer on the market that derives its phosphoric acid from acid phosphate that is superior to our Gem Potato Manure. The potato requires a large percentage of potash, and we give it in the best and most available form. The judicious use of this fertilizer, with proper seed and cultivation, will give an early, well-matured crop, and a potato that will not only carry well, but eat well.

GEM WATERMELON.**Price Per Ton, \$34.00.****GUARANTEED ANALYSIS.**

Ammonia 3 per cent
 Potash 10 per cent
 Phosphoric Acid, available.... 5 per cent

Made from Nitrate Soda, Blood, Bone, Sulphate, Potash, and Acid Phosphate.

Our Watermelon is also good for the cantaloupe, as both crops require the same kind of plant food. If you want a large yield of melons, use our Gem Watermelon.

GEM SWEET POTATO No. 1.**Price Per Ton, \$29.00.****GUARANTEED ANALYSIS.**

Ammonia 4 per cent
 Potash, actual 6½ per cent
 Phosphoric Acid 4 per cent

Made from Cotton Seed Meal, Sulphate of Potash and Acid Phosphate.

Sweet potatoes are grown everywhere over the South and produce good crops on our poor soils if given a little fertilizer, say 400 pounds to the acre, which should be broadcasted in the ridges at least a week before the vines are set.

GEM SWEET POTATO No. 2.**Price Per Ton, \$23.00.****GUARANTEED ANALYSIS.**

Ammonia 2 per cent
 Potash, actual 5 per cent
 Phosphoric Acid 3 per cent

Made from Kainit, Cotton Seed Meal and Acid Phosphate.

Made for use when the farmer has some lot or stable manure that he wants to use, or when the field has been cow-penned.

(Standard mixtures and formulas continued on page 34.)

8th Month

AUGUST, 1909

31 Days

WEATHER FORECASTS

1 to 3, storm period in Cuba; 4 to 6, storm period in Florida; 7 to 8, mild and fair generally; 9 to 10, cloudy; threatening; 11 to 14, hurricane period; beware; 15 to 17, fine weather in Cuba and Florida; 18 to 19, stormy; light reactionary

showers; 20 to 21, high winds; showers 21st; 22 to 23, fair, southwesterly winds; 24 to 26, storm period in Cuba and south Florida; 27 to 28, milder, easterly winds; 29 to 31, showers in west Florida and Porto Rico.

Summary Florida: rainfall above the normal; temperature lower.
Cuba: rainfall about average and same as to temperature.

MOON'S PHASES Day Eastern Time—Cuba Day Central Time—Florida

☾ Full Moon	 1st....	4 h. 14 m. Eve....	1st....	3 h. 14 m. Eve.
☾ Last Quarter	 8th....	7 h. 10 m. Morn....	8th....	6 h. 10 m. Morn.
☾ New Moon	 15th....	6 h. 54 m. Eve....	15th....	5 h. 54 m. Eve.
☾ First Quarter	 23rd....	10 h. 55 m. Eve....	23rd....	9 h. 55 m. Eve.
☾ Full Moon	 31st....	0 h. 8 m. Morn....	30th....	11 h. 8 m. Eve.

Day of Month	Day of Week	Moon's Place at 7 P. M.	Sun at Noon Mark	Moon in Meridian (South)	High Water Key West (See Table)	FLORIDA			CUBA		
						Sun Rises	Sun Sets	Moon Sets and Rises	Sun Rises	Sun Sets	Moon Sets and Rises
		Con. Deg.	H. M.	H. M.	MORN.	H. M.	H. M.	MORN.	H. M.	H. M.	H. M.
1	Sunday ..	♊ 11	12 06	Morn.	7 43	5 18	6 53	Rises Ev	5 32	6 40	Rises Ev
2	Monday..	♋ 25	12 06	31	8 31	5 19	6 52	7 58	5 32	6 39	7 44
3	Tuesday..	♌ 10	12 06	1 28	9 21	5 20	6 51	8 40	5 33	6 38	8 32
4	Wedn'day	♍ 25	12 06	2 23	10 12	5 20	6 50	9 16	5 33	6 38	9 11
5	Thursday	♎ 10	12 06	3 15	11 6	5 21	6 50	9 52	5 34	6 37	9 52
6	Friday ...	♏ 24	12 06	4 5	Ev. 4	5 21	6 49	10 27	5 35	6 36	10 32
7	Saturday.	♐ 8	12 06	4 56	1 14	5 22	6 48	11 2	5 35	6 35	11 12
8	Sunday...	♑ 22	12 05	5 46	2 39	5 22	6 47	11 41	5 36	6 34	11 54
9	Monday..	♒ 6	12 05	6 38	4 0	5 23	6 45	Morn.	5 36	6 34	Morn.
10	Tuesday..	♓ 19	12 05	7 32	5 21	5 24	6 44	24	5 36	6 33	41
11	Wedn'day	♊ 2	12 05	8 27	6 26	5 25	6 43	1 12	5 36	6 33	1 31
12	Thursday	♋ 15	12 05	9 22	7 7	5 25	6 43	2 3	5 36	6 38	2 23
13	Friday ...	♌ 28	12 05	10 17	8 0	5 26	6 42	3 0	5 37	6 32	3 19
14	Saturday.	♍ 10	12 05	11 9	8 35	5 26	6 41	3 56	5 37	6 31	4 15
15	Sunday...	♎ 23	12 04	11 58	9 10	5 27	6 40	4 54	5 37	6 30	5 14
16	Monday..	♏ 5	12 04	Ev. 44	9 43	5 27	6 39	Sets Ev.	5 38	6 30	Rises Ev
17	Tuesday..	♐ 17	12 04	1 27	10 13	5 28	6 38	8 3	5 38	6 29	7 56
18	Wedn'day	♑ 29	12 04	2 8	10 38	5 28	6 37	8 32	5 38	6 28	8 29
19	Thursday	♒ 11	12 04	2 49	11 2	5 29	6 36	9 1	5 39	6 27	9 1
20	Friday...	♓ 22	12 03	3 28	11 26	5 29	6 35	9 28	5 39	6 26	9 32
21	Saturday.	♊ 4	12 03	4 9	11 52	5 30	6 34	9 57	5 39	6 25	10 5
22	Sunday ..	♋ 16	12 03	4 52	Morn.	5 31	6 33	10 28	5 40	6 25	10 39
23	Monday..	♌ 28	12 03	5 37	20	5 31	6 32	11 2	5 40	6 24	11 16
24	Tuesday...	♍ 11	12 02	6 26	1 8	5 32	6 31	11 42	5 40	6 23	12 0
25	Wedn'day	♎ 23	12 02	7 18	2 12	5 33	6 30	Morn.	5 41	6 22	Morn.
26	Thursday	♏ 7	12 02	8 14	3 29	5 33	6 29	28	5 41	6 22	47
27	Friday...	♐ 20	12 01	9 13	4 42	5 34	6 28	1 21	5 41	6 21	1 41
28	Saturday.	♑ 4	12 01	10 13	5 48	5 35	6 27	2 23	5 41	6 20	2 42
29	Sunday ..	♒ 19	12 01	11 13	6 43	5 35	6 26	3 31	5 42	6 19	3 48
30	Monday...	♓ 5	12 01	Morn.	7 37	5 36	6 25	Rises Ev	5 42	6 18	Rises Ev
31	Tuesday ..	♊ 19	12 00	8	8 27	5 37	6 23	7 12	5 42	6 17	7 05

*This High Water is the first one that follows the Moon's meridian passage. To obtain all the other tides of the day and for all the ports or sea-side places of Florida and Cuba see the Explanatory Note accompanying the Tide Table on page 2.

Rose Garden and Lawn.

SIMON PURE ROSE SPECIAL.

Price Per Ton, \$42.00.

GUARANTEED ANALYSIS.

Ammonia 4½ per cent
Potash (K₂O), water soluble.. 5¼ per cent
Available Phosphoric Acid.... 3½ per cent

This fertilizer is made from Sulphate of Ammonia, Nitrate of Soda, Blood and Bone, Sulphate of Potash, and Dissolved Bone Black.

Roses! who does not love roses? There is probably as large a number of roses planted in Florida as any other two flowers, and yet we are not overstocked with them. One trouble is the lack of proper fertilizer. The rose is a gross feeder and, like the heavy-bearing fruit trees, needs plenty of plant food to bear large crops of well-developed flowers. Our rose special is the result of twenty years' experience in rose culture, and we know it is good.

Sprinkle it around the rose bush, being careful not to get it too close to the body. Apply from one to five pounds, according to the size. Rake in lightly and follow with sprinkler, if you have water handy; and if not, the fertilizer is best put on just before or after a rain.

GEM LAWN SPECIAL.

Price Per Ton, \$42.00.

GUARANTEED ANALYSIS.

Ammonia 6½ per cent
Potash (K₂O)..... 5 per cent
Available Phosphoric Acid.... 7 per cent

Made from Sulphate of Ammonia, Sulphate of Potash and Phosphate.

Where is the one who does not admire a green and well-kept lawn? Lawns in Florida, however, are impossible without care and fertilizer. Our Lawn Special is made of pure chemicals. The plant food is in a soluble form so that it can be spread broadcast over the lawn and be washed down with a sprinkler or by the rains. This

fertilizer has no objectionable odor, consequently can be used on the lawn at any time without any inconvenience to the occupants of the house or to your neighbors. This fertilizer is sold in quantities of 50 pounds and upward.

FERTILIZER MATERIAL.

We were the first fertilizer firm to furnish the grower with any kind of fertilizing materials that they might require. Previous to our doing this, it was possible for the grower to buy only manufactured brands; now they can buy anything they want and in any quantity, at reasonable prices. Below we give a list of chemicals and fertilizing materials that are always kept on hand. Write for prices, naming quantity wanted.

AMMONIATES.

Nitrate of Soda. Sulphate of Ammonia.
Dried Blood.

POTASHES.

High - Grade Sulphate Potash. Nitrate Potash.
Low-Grade Sulphate Potash. Kainit.
Muriate Potash. Canada Hardwood Ashes.

AMMONIA AND PHOSPHORIC ACID.

High - Grade Blood and Bone. Raw Bone.
Blood and Bone. Ground Castor Pomace.
Low - Grade Blood and Bone. Bright Cotton Seed Meal.
Pure Fine Steamed Ground Bone. Dark Cotton Seed Meal.

PHOSPHORIC ACID.

High-Grade Acid Phosphate. Acid Phosphate.
Dissolved Bone Black. Odorless Phosphate or Thomas or Basic Slag.

MISCELLANEOUS.

H. G. Ground Kentucky Tobacco Stems. Peruvian Guano (Genuine).
Cut Tobacco Stems. Dark Tobacco Stems.
Land Plaster.

About Special Mixtures.

In the foregoing pages we have listed those formulas that have stood the test of time; that have been tried by experienced growers and found not wanting. In addition to these we have many other formulas and we wish again to impress upon our friends the fact that we make a specialty of mixing special formulas for special crops, and adapting same to the requirements of soils. We were the first manufacturers in the South to give our customers the privilege of having their fertilizers made just as they wished it, and of saying just how much and how little of each element it should contain. If you do not find in our list of standard formulas just what you want, write us, letting us know your needs, and we will mix for you any formula desired.

9th Month

SEPTEMBER, 1909

30 Days

WEATHER FORECASTS

1 to 2, storm period continued; 3 to 5, fair period very generally; 6 to 7, very violent local storms; 8 to 9, fine weather; sultry threatening 9th; 10 to 13, hurricane period; furious storms; 14 to 15, cooler, reactionary showers 15th; 16 to 17, brisk lo-

cal showers; fine weather; 18 to 20, clear and delightful; 21 to 22, heavy rains; cloudy Florida; 23 to 25, thunder storms, Cuba; 26 to 27, beautiful weather; 28 to 30, showers 28 and 29; 30, perfect.

Summary { Florida: rainfall rather below the average; temperature higher.
Cuba: rainfall above the normal and temperature lower.

MOON'S PHASES		Day	Eastern Time—Cuba	Day	Central Time—Florida
☾	Last Quarter.....	6th....	2 h. 44 m. Eve....	6th....	1 h. 44 m. Eve.
☾	New Moon.....	14th....	10 h. 8 m. Morn....	14th....	9 h. 8 m. Morn.
☾	First Quarter.....	22d....	1 h. 31 m. Eve....	22d....	0 h. 31 m. Eve.
☾	Full Moon.....	29th....	8 h. 5 m. Morn....	29th....	7 h. 5 m. Morn.

Day of Month	Day of Week	Moon's Place at 7 P. M.	Sun at Noon Mark	Moon in Meridian (South)	High Water Key West (See Table)	FLORIDA			CUBA		
						Sun Rises	Sun Sets	Moon Sets and Rises	Sun Rises	Sun Sets	Moon Sets and Rises
		Con. Deg.	H. M.	MORN.	MORN.	H. M.	H. M.	EVE.	H. M.	H. M.	EVE.
1	Wedn'day	☾ 4	12 00	1 03	9 17	5 37	6 22	7 49	5 42	6 16	7 47
2	Thursday.	☾ 19	12 00	1 56	10 07	5 37	6 21	8 25	5 43	6 15	8 28
3	Friday...	☾ 4	11 59	2 48	11 00	5 38	6 20	9 2	5 44	6 14	9 10
4	Saturday.	☾ 18	11 59	3 40	11 57	5 38	6 19	9 40	5 44	6 13	9 52
5	Sunday...	☾ 2	11 59	4 33	Ev. 65	5 39	6 18	10 22	5 45	6 12	10 38
6	Monday...	☾ 16	11 58	5 27	2 22	5 39	6 17	11 10	5 45	6 11	11 29
7	Tuesday...	☾ 29	11 58	6 23	3 47	5 40	6 15	11 59	5 45	6 10	Morn.
8	Wedn'day	☾ 12	11 58	7 18	5 07	5 40	6 14	Morn.	5 45	6 09	19
9	Thursday.	☾ 25	11 57	8 13	6 12	5 41	6 12	54	5 45	6 08	1 14
10	Friday...	☾ 7	11 57	9 05	6 55	5 41	6 11	1 50	5 46	6 07	2 09
11	Saturday.	☾ 19	11 57	9 55	7 30	5 42	6 10	2 47	5 46	6 06	3 04
12	Sunday...	☾ 2	11 56	10 41	8 03	5 42	6 08	3 43	5 46	6 05	3 56
13	Monday...	☾ 14	11 56	11 25	8 35	5 43	6 07	4 39	5 46	6 04	4 50
14	Tuesday...	☾ 26	11 56	Ev. 07	9 00	5 44	6 06	Sets Ev.	5 46	6 03	Sets Ev.
15	Wedn'day	☾ 7	11 55	47	9 20	5 44	6 04	6 57	5 47	6 02	6 55
16	Thursday.	☾ 19	11 55	1 27	9 43	5 45	6 03	7 30	5 47	6 02	7 33
17	Friday...	☾ 1	11 55	2 07	10 03	5 45	6 01	7 58	5 47	6 01	8 06
18	Saturday.	☾ 13	11 54	2 49	10 24	5 46	6 00	8 28	5 48	6 00	8 39
19	Sunday...	☾ 25	11 54	3 32	10 48	5 47	5 56	9 00	5 48	5 59	9 14
20	Monday...	☾ 7	11 54	4 19	11 17	5 47	5 58	9 38	5 48	5 58	9 55
21	Tuesday...	☾ 19	11 53	5 09	Morn.	5 47	5 57	10 20	5 49	5 57	10 39
22	Wedn'day	☾ 2	11 53	6 02	01	5 48	5 56	11 09	5 49	5 56	11 29
23	Thursday.	☾ 15	11 52	6 58	1 10	5 48	5 54	Morn.	5 49	5 55	Morn.
24	Friday...	☾ 29	11 52	7 56	2 55	5 49	5 53	05	5 50	5 54	25
25	Saturday.	☾ 13	11 52	8 54	4 25	5 49	5 52	1 09	5 50	5 53	1 28
26	Sunday...	☾ 27	11 51	9 51	5 37	5 50	5 50	2 17	5 50	5 52	2 31
27	Monday...	☾ 12	11 51	10 46	6 37	5 50	5 49	3 27	5 50	5 51	3 39
28	Tuesday...	☾ 27	11 51	11 40	7 30	5 51	5 48	4 37	5 51	5 50	4 44
29	Wedn'day	☾ 13	11 50	Morn.	8 20	5 52	5 47	Rises Ev	5 51	5 49	Rises Ev
30	Thursday.	☾ 28	11 50	33	9 10	5 53	5 46	6 55	5 51	5 48	7 00

*This High Water is the first one that follows the Moon's meridian passage. To obtain all the other tides of the day and for all the ports or sea-side places of Florida and Cuba see the Explanatory Note accompanying the Tide Table on page 2.

Florida Game Laws.

Deer.—It shall be unlawful for any person to hunt wild deer in the state except during the months of November, December and January of each year.

Turkey and Quail.—No person shall hunt or kill any wild turkey, quail or partridge in any part of this state, save only from the first day of November until the first day of March of any year. No person shall kill more than two wild turkeys or more than twenty quail, and no party of two or more persons shall kill more than four wild turkeys or more than forty quail in any one day, and no person shall kill more than five wild turkeys in any one year, and no person or persons, firm, corporation, association, or company shall sell, expose for sale or have in his, her or their possession for sale in this state, any wild turkey, quail or partridge.

Ducks.—It shall be unlawful for any person or persons to shoot wild ducks between the first day of April and the first day of October.

Hunting Sunday.—Whoever uses fire arms by hunting game or firing at targets upon Sunday shall be punished by imprisonment not exceeding twenty days, or by fine not exceeding \$20.

Shipping Game.—Any person or persons, firm or corporation, who shall ship any deer, deerhide or hides, venison, wild turkey, quail or partridge beyond the limits of the county in which the same were killed, shall upon conviction thereof be deemed guilty of a misdemeanor and shall be punished by not less than \$25, or more than \$100 or imprisonment not less than three months or more than six months. Any common carrier or agent or employe of any common carrier who shall receive for carriage, or who shall permit the carriage of any such deer, deerhide or hides, venison, wild turkey, quail or partridge by any such common carrier across any county line in the state shall be punished in the same manner as the shipper: Provided, hunters or hunting parties may take their game home with them in this state, but not for sale.

License for Non-Residents.—All persons who are not citizens of this state, before hunting for the purpose of killing any wild game in this state, shall apply to the clerk of the circuit court of the county the said non-citizen purposes to hunt in, and upon the payment of \$10 to the said clerk by the applicant, the clerk shall issue a permit to hunt in said county, only as provided for in this act and the same shall not be transferable, and it shall be unlawful for any non-citizen of the state to hunt in this state without first obtaining said permit, which permit shall expire on the last day of March next following the date of its issue. That all money collected as provided for in this section shall be paid by the clerk to the county treasurer and shall be applied to paying the fees or salary of the game warden for said county; provided that in any county where there is no game warden, then all money collected as provided for in this section shall be paid by the clerk to the county treasurer for the use of the fine and forfeiture fund.

Any person violating the provisions of this section shall be deemed guilty of a misdemeanor and, upon conviction thereof, shall be punished by a fine not more than \$100 or be imprisoned in the county jail not exceeding ninety days; provided that this act shall apply to counties having special game laws.

Disposition of Fines.—Any person making affidavit giving information sufficient to convict another for violating any of the provisions of the six preceding sections shall be entitled to and shall receive one-half of the fine so imposed and collected, if informant be the game warden; any other shall receive one-third of the fine.

E. O. Painter Fertilizer Company,

Gentlemen:—All of your fertilizer which I have used has done all that was claimed for it, and I am glad to so state.

Bartow, Fla.

(Signed) W. LACY BODY.

10th Month

OCTOBER, 1909

31 Days

WEATHER FORECASTS

1 to 2, fair, southerly breezes; 3 to 4, cloudy (3rd); high winds; rain; 5 to 7, very stormy and much wind; 8 to 10, cloudy and very sultry; threatening; 11 to 14, hurricane period; 15 to 16, cooler

and pleasant; 17 to 18, reactionary local storms; 19 to 20, fair; cloudy, 20th; 21 to 23, local showers; 24 to 28, storm period; rains; 29 to 31, fair period; much cooler.

Summary } Florida: temperature about normal; rainfall above.
 } Cuba: temperature above normal; rainfall less.

MOON'S PHASES Day Eastern Time—Cuba Day Central Time—Florida

☾ Last Quarter	6th....	1 h. 44 m.	Morn....	6th.....	0 h. 44 m.	Morn.
☾ New Moon	14th....	3 h. 13 m.	Morn....	14th.....	2 h. 13 m.	Morn.
☾ First Quarter	22d	2 h. 3 m.	Morn....	22d.....	1 h. 3 m.	Morn.
☾ Full Moon	28th....	5 h. 7 m.	Eve.....	28th.....	4 h. 7 m.	Eve.

Day of Month	Day of Week	Moon's Place at 7 P. M.	Sun at Noon Mark	Moon Meridian in (South)	High Water Key West* (See Table)	FLORIDA			CUBA		
						Sun Rises	Sun Sets	Moon Rises and Sets	Sun Rises	Sun Sets	Moon Rises and Sets
		Con. Deg.	H. M.	MORN.	MORN.	H. M.	H. M.	EVE	H. M.	H. M.	EVE.
1	Friday ...	♊ 13	11 50	1 27	10 00	5 53	5 44	7 33	5 51	5 47	7 43
2	Saturday.	♊ 28	11 49	2 21	10 53	5 54	5 43	8 16	5 51	5 46	8 30
3	Sunday ..	♋ 12	11 49	3 17	11 51	5 54	5 42	9 03	5 52	5 45	9 21
4	Monday..	♋ 25	11 49	4 14	Ev. 55	5 55	5 41	9 54	5 52	5 44	10 14
5	Tuesday .	♌ 9	11 49	5 12	2 08	5 55	5 40	10 48	5 52	5 43	11 08
6	Wedn'day	♌ 22	11 48	6 08	3 30	5 56	5 39	11 45	5 53	5 42	Morn.
7	Thursday	♍ 4	11 48	7 02	4 44	5 56	5 48	Morn.	5 53	5 41	04
8	Friday ...	♍ 17	11 48	7 53	5 41	5 57	5 37	42	5 54	5 40	1 00
9	Saturday.	♍ 29	11 47	8 40	6 21	5 58	5 36	1 38	5 54	5 39	1 52
10	Sunday ..	♎ 11	11 47	9 24	6 55	5 58	5 35	2 34	5 54	5 38	2 45
11	Monday..	♎ 23	11 47	10 06	7 23	5 59	5 34	3 28	5 55	5 38	3 35
12	Tuesday..	♏ 4	11 47	10 47	7 48	5 59	5 33	4 21	5 55	5 37	4 25
13	Wedn'day	♏ 16	11 46	11 27	8 11	6 00	5 31	5 14	5 56	5 36	5 14
14	Thursday.	♏ 28	11 46	Ev. 07	8 34	6 01	5 30	Sets Ev.	5 56	5 36	Sets Ev
15	Friday ...	♐ 10	11 46	48	8 57	6 02	5 29	6 31	5 57	5 35	6 40
16	Saturday.	♐ 22	11 46	1 31	9 12	6 02	5 27	7 02	5 57	5 35	2 15
17	Sunday ..	♑ 4	11 45	2 16	9 38	6 03	5 26	7 37	5 58	5 34	7 52
18	Monday..	♑ 16	11 45	3 05	10 05	6 04	5 25	8 17	5 58	5 33	8 36
19	Tuesday..	♑ 29	11 45	3 56	10 40	6 05	5 24	9 03	5 58	5 32	9 23
20	Wedn'day	♒ 11	11 45	4 51	11 28	6 06	5 23	9 57	5 59	5 31	10 17
21	Thursday.	♒ 24	11 45	5 46	Morn.	6 06	5 22	10 56	5 59	5 30	11 15
22	Friday ...	♒ 8	11 45	6 42	45	6 07	5 21	11 59	6 00	5 29	Morn.
23	Saturday.	♒ 22	11 44	7 37	2 35	6 08	5 20	Morn.	6 00	5 29	16
24	Sunday ..	♓ 6	11 44	8 31	4 13	6 09	5 19	1 06	6 00	5 28	1 19
25	Monday..	♓ 21	11 44	9 24	5 28	6 09	5 19	2 14	6 01	5 27	2 22
26	Tuesday..	♐ 6	11 44	10 16	6 27	6 10	5 18	3 23	6 01	5 26	3 28
27	Wedn'day	♐ 19	11 44	11 09	7 22	6 11	5 17	4 30	6 01	5 25	4 29
28	Thursday.	♐ 6	11 44	Morn.	8 13	6 12	5 16	Rises Ev	6 02	5 25	Rises Ev
29	Friday ...	♐ 21	11 44	03	9 04	6 12	5 15	6 06	6 02	5 24	6 18
30	Saturday.	♑ 6	11 44	1 00	9 53	6 13	5 14	6 51	6 02	5 23	7 07
31	Sunday ..	♑ 20	11 44	1 58	10 44	6 14	5 13	7 42	6 03	5 23	8 01

*This High Water is the first one that follows the Moon's meridian passage. To obtain all the other tides of the day and for all the ports or sea-side places of Florida and Cuba see the Explanatory Note accompanying the Tide Table on page 2.

Insecticide Material.

Prices f. o. b. Jacksonville. 2 per cent. Discount for Cash with Order.

Following is list of insecticides and insecticide materials which we carry in stock. We will take pleasure in securing for our customers, promptly and at reasonable cost, any article not found in this list. We are State agents for the Gould Manufacturing Co. line of Spray Pumps, hose, and other apparatus, and carry a full line of their goods. We can ship from Jacksonville and thus save our customers time and the freight from New York to Jacksonville. Illustrated price list of these spraying appliances will be found in the pages following:

- ALKALI OR SODA ASH.**—Per pound 3c; barrel lots, 2 3-4c.
- AMMONIA, AQUA.**—In drums about 750 pounds net weight. Price per pound, 6½c; drums extra at \$10.00 each. In carboys at 9c. per pound; carboys extra at \$2.00 each.
- AMMONIA ANHYDROUS.**—In drums, net weight about 100 pounds. Per pound 29c., delivered at any point in Florida. Drums extra, \$20.00.
- AMMONIATED COPPER SOLUTION.**—In carboys, about 10 gallons net. Price per gallon, \$1.25. Carboys extra, \$2.00 each.
- ARSENATE OF LEAD.**—1-pound tins at 22c. per pound. 5, 10 and 20-pound pails at 20c. per pound. 50-pound kegs at 19 cents.
- BLUESTONE.**—Sulphate of Copper, Granulated or Crystal. Barrels and bulk. Less than 50 pounds at 10c. per pound. 50 pounds to 100 pounds at 9½c. per pound. 100 pounds to 1 barrel at 9 1-4 c. per pound. Barrel lots, at 9c. per pound. Pulverizing, \$5.00 per ton extra.
- BLACK-LEAF EXTRACT, OR NICOTINE.** 5-gallon cans, per gallon, 95c; 1-gallon cans, per gallon, \$1.25; ½-gallon cans, 75c; ¼-gallon cans, 50c; package included.
- BI-SULPHIDE OF CARBON.**—Cans and 110-pound drums. Cans extra, each 15c.; drums extra, each \$3.00. Per pound, in cans, 20c. Per pound, in drums, 14c.
- BORDEAUX MIXTURE, DRY.**—1-pound boxes, 50-pound bags, kegs or barrels. In 1-pound boxes, per pound, 16½c. In bags, kegs or barrels. Less than 100 pounds at 15½c. per pound. 100 pounds to 1 barrel at 14½c. per pound. Barrel lots at 13c. per pound.
- BORDEAUX MIXTURE (Quick).**—Dry powder 10-pound packages. One package makes one barrel wet bordeaux ready to apply. Price, per pound 10c.
- BORDEAUX MIXTURE, WET.**—Price per gallon, \$1.00; package extra.
- BORDEAUX MIXTURE AND P A R I S GREEN.**—In 1-pound boxes. Less than 100 pounds at 28c. per pound. Over 100 pounds at 26c. per pound. In 35-pound kits, per pound, 26c.
- CARBOLINIUM, AVENARIUS.**—1 or 2 gallons, \$1.30 per gallon; package extra. 3 gallons, \$1.20 per gallon; package extra. 5 or 10 gallons, \$1.05 per gallon; package extra. 15 or 20 gallons, \$1.00 per gallon; package extra. 25 or 34 gallons, 95c. per gallon; package extra. Barrels, 90c. per gallon; package extra.
- CAUSTIC SODA.**—5 and 10-pound cans and drums. Less than 100 pounds, 9½c. per pound. 100 pounds to 300 pounds at 9c. per pound. 500 pounds at 7 3-4 cents per pound. In drums, at 7½c. per pound.
- CARBOLIC ACID, CRUDE.**—Per gallon, 50 cents; package extra.
- CAUSTIC POTASH.**—5 and 10- pound cans. Less than 100 pounds at 15c. per pound. 100-pound lots at 14c. per pound. 500-pound lots, at 13 cents per pound. 50-pound cans. Less than 100 pound lots at 11c. per pound. 500-pound lots at 10c. per pound.
- COPPERAS.** Sulphate of Iron.—In 200-pound bags. Less than 100-pound lots at 1½c. per pound. 100-pound lots at 1¼c. per pound. Ton lots at 1c. per pound. Pulverized, \$5.00 per ton extra.
- COPPER, CARBONATE.**—Less than 50-lb. lots, per pound, 35c. 50 to 100 pounds, at 30c. Over 100 pounds, at 25c.
- COAL TAR.**—Barrel, 50 gallons, \$7.50.
- DEATH DOPE.**—70c. per gallon in barrel lots. Less than barrel lots, 70c. per barrel, package extra.
- DRY SPRAYS.**
Sulphur and Lime Mixture.—Less than 100 pounds at 2 3-4c. per pound. Over 100 pounds at 2c. per pound. Ton lots at \$32.00 per ton.
- Bluestone and Lime Mixture.**—Less than 500 pounds at 8c. per pound. Over 500 pounds at 7c. per pound. Ton lots at 6c. per pound.
- SULPHUR LIME AND TOBACCO DUST.**—Less than 100 lbs. at 3c. per lb. 100 to 1,000 pounds, at 2 3-4 c. per pound. 1,000 pounds and over, at \$50.00 per ton.
- EXCELSIOR.**—1-bale lots at \$1.15 per 100 pounds. Ton lots at \$21.00 per ton. 5-ton lots at \$19.00 per ton.
- FISH OIL.**—Per gallon, 50c, cans extra. Extra for can, 1 gallon, 15c; 5 gallons, 75c. 10 gallons, \$1.00.
- FOOT ROT SOLUTION; PAINTER'S BLACK WASH.**—Price \$1.00 per gallon; package extra. Directions: 6 quarts to 50 gallons of water, apply to eight trees.
- LIME, ROCK.**—One barrel, \$1.15; 5 to 10 barrels at \$1.05 per barrel; 10 barrels or over, at \$1.00 per barrel.
- KRESOL RASCHIG DEODORIZER AND DISINFECTANT.**—50-gallon barrels 90 cents per gallon; 10-gallon cans, \$1.25 per gallon; 5-gallon cans, \$1.65 per gallon; 1-gallon cans, \$2.00 per gallon.
- LIVER OF SULPHUR.**—5-pound cans, 16c. per pound; 10-pound cans, 15½c. per pound; 25-pound cans, 15c. per pound.

11th Month

NOVEMBER, 1909

30 Days

WEATHER FORECASTS

1 to 2, high winds; showers 1st; 3 to 5, fair, except local showers 4th; 6 to 7, storm period; high winds; 8 to 9, less rain in general; cloudy; 10 to 12, gales; cloudy; driving showers; 13 to 15, pleasant; showers 14th; generally fair; 16 to 18, pleasant fall weather; showery 16th and 18th; 19 to 20, very violent thunder storms; 21 to 22, cooler; cloudy with rain 22nd; 23 to 26, clear and delightful; 27 to 28, cool northeast winds; 29 to 30, local storms.

Summary } Florida: rainfall above average; temperature higher.
Cuba: rainfall below average; temperature higher.

MOON'S PHASES Day Eastern Time—Cuba Day Central Time—Florida

☾ Last Quarter	4th....	4 h. 37 m.	Eve.....	4th.....	3 h. 37 m.	Eve.
☾ New Moon	12th....	9 h. 18 m.	Eve.....	12th....	8 h. 18 m.	Eve.
☾ First Quarter	20th....	0 h. 29 m.	Eve....	20th....	11 h. 29 m.	Morn.
☾ Full Moon	27th....	3 h. 52 m.	Morn..	27th....	2 h. 52 m.	Morn.

Day of Month	Day of Week	Moon's Place at 7 P. M.	Sun at Noon Mark	Moon in Meridian (South)	High Water Key West* (See Table)	FLORIDA			CUBA		
						Sun Rises	Sun Sets	Moon Rises and Sets	Sun Rises	Sun Sets	Moon Rises and Sets
		Con. Deg.	H. M.	MORN.	MORN.	H. M.	H. M.	EVE.	H. M.	H. M.	EVE.
1	Monday..	♊ 4	11 44	2 58	11 38	6 14	5 12	8 37	6 03	5 23	8 57
2	Tuesday..	♋ 17	11 44	3 57	Ev. 40	6 15	5 12	9 34	6 04	5 22	9 54
3	Wedn'day	♌ 0	11 44	4 54	1 48	6 16	5 11	10 33	6 05	5 22	10 52
4	Thursday.	♍ 13	11 44	5 47	2 58	6 16	5 10	11 30	6 06	5 21	11 45
5	Friday...	♎ 25	11 44	6 36	4 04	6 17	5 09	Morn.	6 07	5 20	Morn.
6	Saturday.	♏ 8	11 44	7 22	4 58	6 17	5 08	27	6 07	5 20	39
7	Sunday..	♐ 19	11 44	8 05	5 37	6 18	5 08	1 22	6 08	5 20	1 30
8	Monday..	♑ 1	11 44	8 46	6 07	6 18	5 07	2 16	6 08	5 19	2 21
9	Tuesday..	♒ 13	11 44	9 26	6 36	6 19	5 07	3 08	6 09	5 19	3 11
10	Wedn'day	♓ 25	11 44	10 06	7 02	6 20	5 06	4 01	6 09	5 19	3 59
11	Thursday.	♈ 7	11 44	10 45	7 28	6 21	5 06	4 53	6 10	5 19	4 47
12	Friday...	♉ 19	11 44	11 29	7 52	6 22	5 05	5 49	6 10	5 18	5 39
13	Saturday.	♊ 1	11 44	Ev. 14	8 16	6 23	5 05	Sets Ev.	6 11	5 18	Sets Ev.
14	Sunday..	♋ 13	11 44	1 02	8 43	6 24	5 04	6 16	6 12	5 18	6 35
15	Monday..	♌ 26	11 45	1 53	9 10	6 25	5 04	7 01	6 12	5 18	7 21
16	Tuesday..	♍ 8	11 45	2 47	9 47	6 26	5 03	7 52	6 13	5 17	8 12
17	Wedn'day	♎ 21	11 45	3 42	10 28	6 27	5 03	8 49	6 13	5 17	9 09
18	Thursday.	♏ 4	11 45	4 37	11 26	6 28	5 03	9 51	6 14	5 17	10 12
19	Friday...	♐ 18	11 45	5 31	Morn.	6 29	5 02	10 55	6 14	5 17	11 09
20	Saturday.	♑ 2	11 46	6 24	43	6 30	5 02	Morn.	6 15	5 16	Morn.
21	Sunday..	♒ 16	11 46	7 15	2 25	6 31	5 02	01	6 15	5 16	12
22	Monday..	♓ 30	11 46	8 05	4 00	6 31	5 01	1 06	6 16	5 16	1 13
23	Tuesday..	♈ 15	11 46	8 55	5 17	6 32	5 01	2 11	6 17	5 16	2 14
24	Wedn'day	♉ 29	11 47	9 47	6 23	6 33	5 01	3 17	6 18	5 16	3 14
25	Thursday.	♊ 14	11 47	10 41	7 17	6 33	5 01	4 25	6 19	5 16	4 18
26	Friday...	♋ 29	11 47	11 38	8 05	6 34	5 01	5 34	6 20	5 17	5 22
27	Saturday.	♌ 14	11 48	Morn.	8 54	6 35	5 00	Rises Ev	6 20	5 17	Rises Ev
28	Sunday..	♍ 28	11 48	38	9 42	6 36	5 00	6 21	6 21	5 17	6 40
29	Monday..	♎ 12	11 48	1 39	10 32	6 37	5 00	7 19	6 22	5 17	7 39
30	Tuesday..	♏ 25	11 49	2 39	11 23	6 38	5 00	8 18	6 23	5 17	8 37

*This High Water is the first one that follows the Moon's meridian passage. To obtain all the other tides of the day and for all the ports or sea-side places of Florida and Cuba see the Explanatory Note accompanying the Tide Table on page 2.

LIME, AIR-SLAKED, OR HYDRATED.—In sacks, per ton, \$12.00.

PARIS GREEN.—1-pound box, each, 35c. Bulk, less than 100-pound lots, at 33c. per pound. Bulk in 100-pound lots, at 32c. per pound.

RESIN COMMON.—Less than 100-pound lots at 2c. per pound. In 100-pound lots at 1 3-4c. per pound. Barrel lots at 1½c. per pound.

SLUG SHOT, HAMMONDS.—In 5-pound packages. Per pound, 7c; 1 pound, in perforated screw top tin canisters, 25c. Bellows, small, for garden use, strong and well made, each \$1.50.

SULPHUR ACID, 50 degrees BAUME.—Carboys containing about 150 pounds net weight, at 1¼c. per pound. Ton lots at 1c. per pound; carboys extra. \$2 each.

SULPHUR—Soda Solution for Rust Mite.—Per gallon, 25c; package extra. Use one quart solution to fifty gallons water.

SULPHUR FLOWERS.—In 100-pound bags. Less than 100-pound lots at 3½c. per pound. In 100-pound lots at 3c. per pound. In ton lots at 2 3-4c. per pound. In barrels 10c. per 100 higher.

SULPHUR (ROLLED BRIMSTONE).—Less than 100-pound lots at 3c. per pound. In 100-pound lots at 2 3-4c. per pound.

SULPHUR, FLOUR.—In 100-pound bags. Less than 100-pound lots at 3c. per pound; 100-pound lots at 2 3-4c. per pound. In ton lots at 2½c. per pound. In barrels 10c. per 100 higher.

THRIP JUICE, HAMMONDS.—Per quart, 80c; per gallon, \$2.25. In 5-gallon kegs, per gallon, \$2.00. Larger quantities, special prices, package included.

TARGET BRAND WHITE FLY DESTROYER.—1 gallon, 75c, package extra; 5 gallons, \$3.50, package extra; 10 gallons, \$7.00, package extra; 25 gallons, \$16.25, package extra; 50 gallons, \$30.00, package included.

TOBACCO DUST.—Fine ground for spraying insects. Less than 500 pounds, at \$2.40 per 100 pounds.

WHALE OIL CAUSTIC POTASH SOAP No. 3.—1 pound, 15c; 2 pounds, 25c; 5 pounds, 50c; 25 pounds, \$2.00; 35 to 100 pounds, at 6c. per pound; 100 pounds to one barrel, 5c. per pound; barrel lots, or over, 4c. per pound.

Somner-Hart Orange Clipper.

The clipper is made after a design furnished by Mr. W. S. Hart, of Hawks Park. It contains all the essentials of a first-class clipper, being made of the best of steel, and rounded tips to prevent clipper cutting. When you once use this clipper you will use no other. The best is the cheapest. Price by mail \$1.25 each, postpaid; price per dozen \$12.00, express collect.

E. O. PAINTER FERTILIZER CO., Jacksonville, Fla., Sole Agents.

MR. F. G. SAMPSON, of Boardman, writes: "You don't know what perfect work we got from Mr. Hart's clippers. By overhauling other patterns we thought we were doing pretty well, but I would not let my Hart Clipper go for a five."

12th Month

DECEMBER, 1909

31 Days

WEATHER FORECASTS

1 to 2, fair period; dry in Cuba; 3 to 4, severe local showers; 5 to 6, beautiful weather; 7 to 8, cooler with clouds and high winds; 9 to 11, unsettled period; cloudy, rain 11th; 12 to 15, general storm

period; 16 to 17, much cooler; delightful; 18 to 20, unsettled; showers 19th; 21 to 23, storm period; 24 to 26; cloudy; showers; continued rain; 27 to 29, cool and fair; 30 to 31, continued fair weather.

Summary

Florida: rainfall below normal; temperature lower.

Cuba: rainfall much below the average; temperature higher.

MOON'S PHASES

Day

Eastern Time—Cuba

Day

Central Time—Florida

☾ Last Quarter.....	4th.....	11 h. 12 m.	Morn....	4th.....	10 h. 12 m.	Morn
☾ New Moon.....	12th.....	2 h. 58 m.	Eve.....	12th.....	1 h. 58 m.	Eve.
☾ First Quarter.....	19th.....	9 h. 17 m.	Eve.....	19th.....	8 h. 17 m.	Eve.
☾ Full Moon.....	26th.....	4 h. 30 m.	Eve.....	20th.....	3 h. 30 m.	Eve.

Day of Month	Day of Week	Moon's Place at 7 P. M.	Sun at Noon Mark	Moon in Meridian (South s)	High Water Key West* (See Table)	FLORIDA			CUBA		
						Sun Rises	Sun Sets	Moon Rises and Sets	Sun Rises	Sun Sets	Moon Rises and Sets
		Con. Deg.	H. M.	MORN.	H. M.	H. M.	H. M.	EVE.	H. M.	H. M.	EVE.
1	Wedn'day	☾ 9	11 49	3 35	Ev. 17	6 38	5 00	9 18	6 23	5 17	9 36
2	Thursday.	☾ 21	11 49	4 28	1 16	6 39	5 00	10 17	6 24	5 17	10 31
3	Friday ...	☾ 4	11 50	5 17	2 17	6 39	5 00	11 13	6 25	5 17	11 24
4	Saturday.	☾ 16	11 50	6 01	3 12	6 40	5 01	Morn.	6 25	5 17	Morn.
5	Sunday ..	☾ 28	11 51	6 43	4 00	6 41	5 01	07	6 26	5 18	14
6	Monday...	☾ 10	11 51	7 23	4 41	6 42	5 01	1 01	6 27	5 18	1 04
7	Tuesday..	☾ 21	11 51	8 03	5 17	6 43	5 02	1 53	6 27	5 18	1 51
8	Wedn'day	☾ 3	11 52	8 43	5 48	6 43	5 02	2 46	6 28	5 18	2 41
9	Thursday.	☾ 15	11 52	9 25	6 18	6 44	5 02	3 40	6 29	5 19	3 32
10	Friday ...	☾ 27	11 53	10 09	6 47	6 44	5 03	4 36	6 29	5 19	4 23
11	Saturday.	☾ 10	11 53	10 56	7 17	6 45	5 03	5 34	6 30	5 20	5 18
12	Sunday ..	☾ 22	11 54	11 47	7 50	6 46	5 03	6 33	6 30	5 20	6 14
13	Monday ..	☾ 5	11 54	Ev. 41	8 23	6 47	5 04	Sets Ev.	6 31	5 20	Sets Ev.
14	Tuesday..	☾ 18	11 55	1 36	9 02	6 47	5 04	6 43	6 31	5 20	7 03
15	Wedn'day	☾ 1	11 55	2 33	9 45	6 48	5 04	7 45	6 32	5 21	8 04
16	Thursday.	☾ 15	11 56	3 28	10 35	6 49	5 04	8 49	6 32	5 21	9 04
17	Friday ...	☾ 28	11 56	4 21	11 36	6 50	5 05	9 54	6 33	5 22	10 05
18	Saturday.	☾ 12	11 57	5 11	Morn.	6 50	5 05	10 58	6 33	5 22	11 06
19	Sunday...	☾ 26	11 57	6 01	48	6 51	5 06	Morn.	6 34	5 23	Morn.
20	Monday ..	☾ 10	11 58	6 49	2 15	6 51	5 06	03	6 34	5 23	05
21	Tuesday ..	☾ 25	11 58	7 39	3 47	6 52	5 06	1 05	6 35	5 23	1 03
22	Wedn'day	☾ 9	11 59	8 30	5 10	6 52	5 07	2 11	6 35	5 24	2 06
23	Thursday.	☾ 23	11 59	9 23	6 10	6 53	5 07	3 18	6 36	5 24	3 07
24	Friday ...	☾ 8	12 00	10 20	7 07	6 53	5 08	4 24	6 37	5 25	4 10
25	Saturday.	☾ 22	12 00	11 20	7 57	6 53	5 08	5 32	6 37	5 25	5 13
26	Sunday...	☾ 6	12 01	Morn.	8 44	6 54	5 09	Rises Ev	6 38	5 26	Rises Ev
27	Monday ..	☾ 20	12 01	20	9 30	6 54	5 09	5 59	6 38	5 26	6 19
28	Tuesday..	☾ 3	12 02	1 19	10 15	6 55	5 10	7 01	6 38	5 27	7 20
29	Wedn'day	☾ 16	12 02	2 15	11 00	6 55	5 10	8 03	6 39	5 27	8 19
30	Thursday.	☾ 29	12 03	3 07	11 47	6 56	5 11	9 01	6 39	5 28	9 14
31	Friday ...	☾ 11	12 03	3 54	Ev. 34	6 56	5 11	9 58	6 40	5 28	10 06

*This High Water is the first one that follows the Moon's meridian passage. To obtain all the other tides of the day and for all the ports or sea-side places of Florida and Cuba see the Explanatory Note accompanying the Tide Table on page 2.

Spraying Appliances.

Triplex Power Spraying Outfit.

This outfit consists of a 2 H. P. Gasolene Engine, complete. A bronze fitted Triplex Pump with By-Pass, Water Relief Valve, pressure gauge, Brass Discharge shut-offs with four 25 foot leads of 1-2 inch discharge hose with couplings, 10 feet 1 inch suction hose and strainer, Brass "Y" connections, 4 large "Mistry" nozzles. The Gasolene Engine has been selected after most careful tests; no engineer is necessary to run it; anyone with ordinary intelligence can handle it with perfect safety. The cost of operation is but little. The pump and Engine are direct connected by reduction gearing and mounted on a solid cast iron bed plate, 21 x 36 inches, which keeps the shaft in perfect alignment at all times. At usual speed of 50 revolutions the Pump will deliver about 6 gallons per minute.

The Pump and Engine can be used to fill tank.

Price Outfit Complete, \$290.00.

Bamboo extension (page 46) for elevating the nozzle to the upper parts of the foliage when praying, furnished for \$4.50 each,

"Vice-Admiral" Power Sprayer.

The Vice-Admiral Power Sprayer has been on the market for a number of years. The Pump is our Fig. 1509, fully described on another page. The Gasolene Engine is the same as in Fig. 1428. This Outfit is by far the best moderate priced Power Sprayer on the market. While it is very unlikely that the engine or pump will get out of order, extra parts are carried in stock, and can be supplied immediately upon request.

The engine is extremely simple, requires no engineer to run it and when not used for spraying can be detached from the Pump by removing one bolt in the driving gear, and then be utilized for a variety of purposes. This Outfit is of ample capacity for eight "Mistry" nozzles maintaining a pressure of 125 lbs. It is fitted with a 200 pound pressure gauge and a Relief Valve that can be adjusted for any desired pressure. This valve should be connected by pipe back to the tank; when the pressure goes above the desired point the valve opens and returns the spray liquid to the tank.

Outfit N.—Two and a half inch cylinder; 10 feet 1 inch suction hose. Two 25-ft leads of 1/2 inch discharge hose with "Y" connection on each. Four large "Mistry" nozzles. Pressure gauge. Water relief valve and a 2-horse power gasolene engine. Complete and ready to operate,

Price, \$225.00.

"Pomona."

A Powerful Sprayer, All Working Parts Bronze
No Leather Packings, Adjustable Stroke.

The Pomona will supply four leads of hose and eight nozzles. Its working parts are of solid bronze. The pump has steel air chamber extending from top of sprayer to the valve chamber, making it easy to get up sufficient pressure and continue spraying for some time after the pumping has stopped. Pump may be placed in any size barrel. Agitator is operated by same lever that works the sprayer. All working parts may be easily removed and cleaned without disturbing any other portion of the pump.

PUMP AND AGITATOR—Plunger, $2\frac{1}{2}$ in. dia., 3, 4 or 5 in. adjustable stroke; $\frac{1}{2}$ and $\frac{3}{4}$ in. double discharge hose. Price, \$15.00

OUTFIT C—With agitator and one lead 15 ft. $\frac{1}{2}$ in. discharge hose with "Mistry" or "Mistry Jr." nozzle. Price, \$18.75

OUTFIT D—With agitator and two leads 15 feet each $\frac{1}{2}$ in. discharge hose with "Mistry" or "Mistry Jr." nozzle. Price, \$22.00

We supply barrel and mount sprayer for \$2.50 extra net, but barrel is not furnished unless specially ordered. If agitator is not wanted deduct \$1.00 from list.

"Fruitall."

Working Parts Bronze, Long Lever, Good
Pressure Easily Maintained, a Well
Made, Low Priced Sprayer.

The Fruitall is lighter in weight and smaller in capacity than the Pomona. The cylinder being only two inches in diameter. All working parts are of bronze. The pump is regularly fitted with wing agitator. Sprayer is held in place in the barrel by an adjustable clamp at the top, fitting over the end of barrel stave and an anchor at bottom of barrel. The large air chamber makes it possible to get up a good pressure. Plunger is packed from outside. The Fruitall is ample for two leads of hose and four nozzles.

PUMP WITH AGITATOR—Plunger 2 in. dia., 4 in stroke, $\frac{1}{2}$ in. discharge hose, Price, \$10.00.

OUTFIT C—With agitator and one lead 15 feet., $\frac{1}{2}$ in. discharge hose with "Mistry" or "Mistry Jr" nozzle. Price, \$13.75

OUTFIT D—With agitator and two leads 15 feet each, $\frac{1}{2}$ in. discharge hose with "Mistry" or "Mistry Jr." nozzle. Price, \$17.00

We supply barrel and mount sprayer for \$2.50 extra, net, but barrel is not furnished unless specially ordered. If agitator is not wanted deduct 75c. from list.

NONE MORE SATISFACTORY.

E. O. Painter Fertilizer Company,
Jacksonville, Fla.

Largo, Fla.

Gentlemen:—Your favor of the 1st received and noted. In reply would say that I have never done business with any house that has been more satisfactory than the business I have done with you. You have often acceded to what I have thought, and I shall certainly do all I can for your house.

Yours truly,

(Signed) C. W. JOHNSON.

Hand Pumps for Spraying.

THE VICE ADMIRAL.

These pumps are double-acting and of sufficient capacity to supply four leads of hose, or two leads each of 2, 3 or 4 nozzles. They have removable brass lining which can be quickly withdrawn by removing the cylinder head. The brass piston is outside-guided, making a perfectly straight thrust through the stuffing box. The bronze valves and bronze seats are easily reached for examination. The air chamber is large. There are two discharge openings fitted for 1-2 or 3 4 inch hose, as desired. The Vice Admiral is a modification of the Admiral. It is fitted with pitman in order that it may be readily attached to gasolene engine, for a power sprayer.

Pump Only—2 1/4 in. cyl. 1 in. suction hose, 1/2 in. double discharge hose, \$25.00.

Outfit K—2 1/4 in. cyl. Sprayer with 5 ft. 1 in. rubber suction hose and strainer. Two 25 ft. lengths of 1/2 in. discharge hose, nozzles and fittings, \$55.00.

THE ADMIRAL.

Pump Only—2 1/2 in. cyl., 1 in. suction hose, 1/2 in. discharge hose, Price \$25.00

Outfit G—2 1/2 in. cyl. with 5 ft. of 1 inch suction hose and strainer; 25 feet of 1/2 n. disc. hose with 1 "mistry" or other nozzle, \$32.75

Outfit H—2 1/2 in. cyl. like "G;" 2 25 ft. lengths 1 in. dis. hose; 2 "mistry" or other nozzles, \$38.25

Outfit J—2 1/2 in. cyl. like "G;" with 4 25 ft. lengths 1/2 in. dis. hose; 4 "mistry" or other nozzles, \$50.25

"Monarch."

High Grade Sprayer for Orchard Work.

Made with two vertical cylinders and two bronze trunk plungers operated by single lever. The construction permits all gritty substances to pass through the valves without cutting the cylinders. All working parts are bronze. The plungers are packed from the outside, and the valves can be easily reached by removing the valve covers. There is a discharge opening on each side,

and the pump is powerful enough to supply four leads of hose, connecting with Y.

Pump Only — 2 in. cyl. 3/4 in. suction hose, 1/2 in. double discharge hose - - - \$22.50

Outfit C—2 in. fitted with 5 ft. 3/4 in. suction hose with strainer and 1 lead 1/2 in. discharge hose 15 ft. long with one "mistry" or other spray nozzle. - - - \$29.25

Outfit D—2 in. fitted same manner with 2 leads 1/2 in. discharge hose each 15 ft. - - - \$38.75

Knapsack and Bucket Sprayers.

Figure 989

"HANDY" KNAPSACK SPRAYER

Made entirely of brass and copper. Has ball valves and metal plungers. Leakage of fluid from stuffing box will drip back into tank. Capacity 5 gallons.

Price—With 3½ ft. $\frac{3}{8}$ in. discharge hose and Mistry Nozzle, \$15.00.

Figure 1323

"COMBINATION" KNAPSACK SPRAYER

Tank made of galvanized iron. 5 gals. capacity. Pump is brass with wing guided valves ground to fit valve seat.

Price—With 4 ft. $\frac{3}{8}$ in. dis. hose, Mistry or Mistry Jr. Nozzles and Extension, \$10.00.

Brass Bucket Sprayers.

Figure 1068.

BRASS SPRAYER AND BUCKET

Useful for variety of purposes. Tank is of galvanized iron with solid wood bottom extended at one end for foot hold. Capacity about 6 gallons.

Price—With 5 ft. of $\frac{3}{8}$ in. dis. hose and Spray Nozzle, \$9.00.

Figure 561½

THE PREMIER

This sprayer is used with pail or bucket. It is strong, durable and easily operated. Cylinder, plunger, plunger rod and gland are all brass. The strong malleable iron foot-hold enables one to pump with one hand and hold nozzle with the other. Price with 2½ feet $\frac{3}{8}$ in. suction, 3 ft. $\frac{3}{8}$ in. discharge hose, nozzle and strainer, \$6.5

BARREL CART

FOR MOUNTING BARREL SPRAYERS, ETC.

FIGURE 1133

The construction is such that any barrel can be picked up and held in place by chain that passes around the barrel. It is designed for mounting our "Barrel Sprayers" and will also be found useful for handling extra barrels of spray mixture, etc. The wheels have 2½ inch tires.

Cart complete without Barrel, Price.....\$10.00
 Cart complete with Barrel and Pump at additional price of particular Pump
 or "Outfit" selected.

Bamboo Extension for Attaching to Hose.

Consisting of aluminum pipe inside of bamboo rod, pipe has ¼ inch inside diameter. Brass stop cock ¼ inch female pipe thread, thus adapting it for attachment to hose by Fig. 65. Other end cut ¼ inch male pipe thread to fit nozzle. Ten feet long with cock. Price.....\$4.50

Iron Pipe Extension.

One-quarter inch galvanized pipe extensions in 2, 4, 6, 8 and 10 foot lengths, threaded both ends, with coupling. Price 10 cents per foot.

SPRAYING TANKS

FOR MOUNTING HAND OR POWER SPRAYERS
 AND HAULING WATER.

Built to evenly distribute the weight of load over entire wagon.

The staves are strongly gripped with steel and hard wood. The joints are machine made. Tank weighs about 200 pounds, is 8 feet long, 3 feet wide, and has capacity of 200 gallons, also made size 5 feet by 3 feet same capacity.

Tanks furnished with or without agitators. Paddles of agitator are bound with steel and run on a steel track in bottom of tank. Agitator may be taken out through manhole and tank used for hauling water.

Tank either size, with bolster and Agitator.....\$20.00
 Without Agitator\$18.00

TANKS BUILT TO ORDER, ANY SIZE.

Lowell Fountain Compressed Air Sprayer.

This Illustration shows the Lowell Fountain Compressed Air Sprayer as used for spraying the spores of the fungi on trees infested with white fly. This is a splendid Sprayer for this purpose, but for general spraying is not practical for trees more than ten

feet high, unless used with a ladder.

The best Compressed Air Sprayer on the market. Capacity 3 gallons of liquid. Air pump is made of brass and so arranged that liquid cannot come in contact with the plunger, therefore does not require constant packing. Sprayer is operated by pressure of the finger on the valve trigger. Releasing the trigger stops the spray. This same Sprayer is used for spraying insecticides and fungicides on all kinds of low growing crops, such as tomatoes, beans, cucumbers, watermelons, etc.

Price, all Brass, \$7.00 Galvanized steel, \$5.50

The Galvanized is used for spraying on the fungi spores, or white fly, as the brass injures the effectiveness of the spores.

Lowell Glass Tank Sprayer.

Solution tank is a one quart
Mason Glass Fruit Jar.

It A perfectly DRY PUMP—when plunger is drawn back no solution is sucked back into pump cylinder; this leaves VALVES always DRY and PLIABLE and ready for use, pump cylinder being six inches longer than any other make allows operator to stand straight up and gives no backaches. Price, tin, 85c; brass, \$1.25

Lowell Blow Powder Gun.²

An excellent machine for dusting dry insecticides on plants and shrubbery. Used largely by poultry raisers as well as small gardeners.

Price..... \$.85

Spray Nozzles.

"VERMOREL."

- Figure 1103 Price \$2.00
Figure 1104 Price \$2.75
Figure 1310 Price \$3.50

"THE MISTRY."

- Figure 1432—Superior in every way to all others made entirely of bronze Price \$2.00
Figure 1431—A smaller size "Mistry" without swivel adjustments..... Price \$1.00
Figure 1433—Shows two "Mistry" nozzles on Fig. 1074 1-2, Brass Y. They can be adjusted to spray any direction. With brass Y.... Price \$4.50

THE "MISTRY JR."

- Figure 1501—Like the Mistry it is one of the most satisfactory nozzles yet placed on the market. Made of brass with hardened tool steel disc, which can be removed and replaced by new one..... Price \$1.50
Extra discs, per doz. .60

CYCLONE NOZZLE.

- Figure 51 Price \$.35
Figure 52—The Pacific Cyclone same as Figure 51 but has end discharge..... Price \$.40

IMPERIAL NOZZLE.

- Figure 1458 ... Price \$.35

SENECA NOZZLE

- Figure 81 Price \$1.00

THE LENOX NOZZLE.

- Figure 1495—Made especially for white-washing and other methods of painting. Superior to any on the market for this purpose..... Price \$.75

STRAINERS.

- Figure 1500—4 1-2 inch strainer, 1 in. wrought pipe connection..... Price \$1.50
Figure 70—Fitted for { 3-4 in... Price \$.50
 { 1 in... " .50
 hose connection { 1 1-4 in.. " 1.00
Figure 71—1 in. wrought pipe connection.. \$.50

Spray Fittings.

- Figure 54—Brass stop cock with stuffing box
 $\frac{1}{4}$ inch female pipe thread cut both ends. Price \$.65
- Figure 85—Brass stop cock to shut off spray
 quickly, has shank for $\frac{1}{2}$ inch dis. hose
 and $\frac{1}{4}$ inch male pipe thread to attach
 spray nozzle or extension.....Price \$.65
- Figure 1338—Brass stop cock.....Price \$1.75
- Figure 1273—Funnel and Strainer. Made of
 heavy block tin with brass wire cloth.
 Strainer 9 in. in diameter, 10 in. deep...Price \$1.50
- Figure 67—Coupling one end cut $\frac{1}{4}$ in. pipe
 threadPrice \$.25
- Figure 1092—Brass shut-off discharge connec-
 tionPrice \$1.50

BRASS HOSE COUPLINGS.

Figure 504.—Size In.	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$
Per Doz.....	\$3.00	\$3.00	\$4.50	\$10.00
Female }				
Half }	2.00	2.00	3.00	6.65

Figure 1186—Brass "Y" Discharge and Shut-
 offPrice \$2.00

Figure 49 $\frac{1}{2}$ —Brass Y same as fig. 49, except
 has female thread on inlet.....Price \$.80

Figure 49—Brass Y 3-4 or 1 in. thread inlet and
 $\frac{1}{2}$ or $\frac{3}{4}$ in. thread lateral dischargePrice \$.80

Figure 1074 $\frac{1}{2}$ —Brass Y tapped to fit $\frac{1}{4}$ in.
 pipe at butt, adapted to fit figs. 65 and 67
 couplings for hose.....Price \$.50

Figure 89—Brass hose nipple, one end cut
 male pipe thread other end male hose thread.
 $\frac{1}{2}$ or $\frac{3}{4}$ in. hose, $\frac{3}{4}$ in. iron pipe.....\$.25
 $\frac{1}{2}$ or $\frac{3}{4}$ in. hose, 1 in. iron pipe\$.25
 $\frac{1}{2}$ or $\frac{3}{4}$ in. hose, $1\frac{1}{4}$ in. iron pipe\$.50
 1 in. hose, 1 in. iron pipe.....\$.50
 1 in. hose, $1\frac{1}{4}$ in. iron pipe.....\$.50
 $1\frac{1}{4}$ in. hose, $1\frac{1}{4}$ in. iron pipe\$.50

Figure 1074—Brass Y tapped $\frac{1}{4}$ inch pipe
 thread at butt.....Price \$.50

Figure 65—Coupling small end cut $\frac{1}{4}$ inch
 pipe thread to fit nozzle, large end cut to
 fit $\frac{1}{2}$ or 3-4 inch male hose coupling....Price \$.25

Figure 30 $\frac{1}{2}$ —Pressure Gauge for 200 lbs.
 diameter $3\frac{1}{2}$ inches. Price cut for $\frac{1}{4}$
 inch pipePrice \$3.00

SHERMAN HOSE CLAMPS.

Figure 1272—Size, inches	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$
Price per doz.....	\$.60	\$.60	\$2.00	\$2.50

Leggett's Champion Dry Powder Duster.

POTATOES.

TOBACCO.

Will green two rows of potatoes or other vegetables at once, as fast as a man walks.

Adjustable to any width of row. Length of machine is such that the poison or dust is kept at a safe distance from the operator.

Anyone can use it, and will it last for years.

"JUMBO" ORCHARD DUSTER.

Spray your Orchard or Orange Grove by the Most Effective, Easiest, Swiftest Method.

Distributes Dry Insecticides and Fungicides to Perfection, with Lime as a Conveyor.

Machine is intended to be mounted on the back of a wagon, hand cart or on a slide. Is 43 inches long, 24 inches high, and furnished with a 24 inch non-collapsible rubber tube, which gives all needed elasticity, enabling the operator to direct the tubing either up, down, or either side; also four 3 foot metal tubes and one spread nozzle. The reservoir holds a little over half a bushel; 30 lbs. of Lime Dust or Sulphur, 50 pounds of Paris Green.

No. 14 McWhorter Improved Horse Fertilizer Distributer.

Price \$35. Shipping and Net Weight 300 lbs.
Hopper Capacity 250 lbs.

It seems to us that the man who makes anything like an extensive use of fertilizer, and studies at all the question of economy, cannot hesitate long as to whether he ought to use this machine. Its cost will soon be returned in the saving of labor, and the work is first-class in every respect, as has been fully demonstrated in all the experience we have had with it. Remember that it fertilizes two and often three rows at once, side-dresses

growing crops and broadcasts perfectly.

No. 21 McWhorter Hand Fertilizer Distributer.

We heartily recommend this machine to every user of commercial fertilizers. It has been in constant and universal use for a number of years in the great trucking sections about Norfolk, Va., where we first introduced it. This territory is scarcely equalled in the amount of fertilizer used by any place of the same size in the country. It may also be said that a great deal of the work done shows a neatness that challenges comparison with any trucking section in the land. The varied crops, the close, compact work, and the necessity for frequent and unusual ways of applying fertilizer demand something more than an ordinary distributor.

Set for Side or Top Dressing 4 rows at one time

Price \$11.00, Net Weight 61 lbs.

Simple in Construction, easily Understood and Effective in Operation.

Set as a Broadcaster 30 inches wide

Our Distributer has kept pace with every new demand, whether it is for furrow work, to broadcast evenly over the growing crop, to divide into two, three or four streams to dress that number of rows at once, or to distribute between several rows.

Painter's Sure-Track Truck.

WITH LOW WHEELS AND BROAD TIRE THAT WILL NOT RUT. FURNISHED WITH EITHER SHAFTS OR TONGUE.

This truck is built with special reference to use in orange groves, and makes a most convenient truck for hauling fruit. It is admirably adapted for mounting power spraying outfits for grove use, and of sufficient capacity for both engine and tank. The principal features are the low platform and the short turn, which is so necessary for hauling in groves. The truck is built light, but is very serviceable, all material being No. 1 quality, and is well ironed and braced. The turn tables are twelve inches in diameter. Instead of coupling pole or reach, we use two $\frac{3}{4}$ -inch steel rods or cross reaches to connect the front and rear axles, on account of the advantage gained in making short turns. The cross reaches make it possible to turn in just one half the space that would be necessary if we used the regular reach. In making the turn, whatever posts, trees, or obstacles of any kind that the front wheels miss, the rear wheels will also, as they follow in exactly the same track as the front wheels. Platform frame is 10 feet long inside of stake pockets, and 23 inches wide outside. Any width of flooring can be used. Axles are hickory fitted, with 3×9 inch skains, and are 49 inches long over all. With wheels 24 inches high, top of frame is just 29 inches above the ground. Wheels have steel tires, oval staggered steel spokes, with solid cast hub, and are practically everlasting for this class of work.

Prices are for Trucks Complete with Frame and Tongue, But no Flooring.

f. o. b. Jacksonville. Shipped only from factory.

No. 58. With wheels 22 in. high, $5 \times \frac{1}{4}$ -in. tires.....	price	\$35.60,	weight	535 lbs.
No. 59. With " 24 in. " $5 \times \frac{1}{4}$ -in. "	price	36.20,	"	545 lbs.
No. 60 With " 26 in. " $5 \times \frac{1}{4}$ -in. "	price	36.80,	"	560 lbs.
Neck yoke single and double trees.....	add	3.00,	"	32 lbs.
Double Heel Bent Shafts, instead of tongue	add	4.00 to list.		

Copyrighted

TRADE MARK

CERTIFICATE OF ORIGIN

We, the undersigned, herewith confirm that the Barrel to which is attached trade mark and tin over bung as shown herewith, and which barrel is marked

R.A. & C^o lot and branded with the number is the Original Barrel as shipped from the factories of the firm Avenarius Bros., Guedelgesheim & Adlershof, Germany, and contains the

Genuine Avenarius Carbolineum

R. AVENARIUS & C^o
Stuttgart, Hamburg, Berlin & Cologne

TIN OVER BUNG

CARBOLINEUM
GEOR. AVENARIUS
GUED. GUESHEIM
ADLERSHOF IN BERLIN

Top heading of barrel Bottom heading of barrel

Improper use of this Certificate in the disposal of other goods, either by its substitution or imitation, will be considered a violation of the copyright laws, and every person guilty of such violation will be prosecuted accordingly.

FOR SALE BY E. O. PAINTER FERTILIZER CO. IN GALLON OR BARREL LOTS.

Household Recipes.

Ginger Cookies.—Put into a bowl a cup of butter and a pint of molasses and set aside on stove until the butter is soft enough to cream with the molasses. Beat very light, add a teaspoon of allspice and a tablespoon of ground ginger. Now stir in a teaspoonful of baking soda, dissolved in a tablespoon of hot water, add enough flour to make a soft dough. Mold with floured hands into cakes. Handle very lightly. Bake quickly.

Potato Puffs.—Two cupfuls of mashed potatoes put into a saucepan. Add the yolks of two eggs, a quarter cup of cream, one tablespoonful of butter and season to taste. Stir constantly over the fire until the potatoes are very light and hot. Remove from the fire, and stir in, carefully, the well-beaten whites of the eggs. Put the potatoes into greased gem pans and bake in an oven until brown.

Ginger Bread Squares.—Take one-quart of flour, six ounces of sugar, half a pound of molasses, a quarter of a pound of fresh butter, two ounces of candied lemon peel (chopped fine), half an ounce of ground ginger and a few drops of lemon juice. Mix well, cut in small squares and bake for ten minutes.

Tin Wedding Cake.—Rub one cup of butter and three cups of sugar to a cream. Add one cup milk and four of flour, five eggs.

Apple Sauce.—Pare, core and slice some apples, stew till tender, add a little butter and some brown sugar.

Chow Chow.—One-half gallon cider vinegar, and one-half pound of yellow mustard, ground. Make a paste of the mustard with a little vinegar; put vinegar on the fire and when it boils, stir in the mustard and let it simmer. Then take it off and add one-quarter pound of mustard seed, eight peppers, chopped fine, one quart of small onions, one dozen cucumbers (small), one quart of lima beans, boiled, half done, one quart of green corn, partly cooked, one-quarter peck small string beans, one head of cabbage, cut fine, and one-half teacup of salt. Partly boil the vegetables except cucumbers, peppers, and cabbage. Salt the cabbage and cucumbers, let stand one hour, drain off. Mix all together and boil five minutes.

Mustard Pickle.—A quarter peck of small cucumbers, a quarter peck of green string beans, one pint of green peppers, one quart of small onions. Cut all in small pieces; put cucumbers and beans in a strong brine for twenty-four hours; remove from brine and pour on one pound of ground mustard, mixed with one-half pint of sweet oil and one and a half quarts of vinegar.

Egg Sauce.—Five tablespoons of drawn butter, the yolk of two hard-boiled eggs smashed fine, seasoning; four tablespoons vinegar, three of salad oil, a little catsup if desired. Stir well and boil for some minutes.

To Keep Beet and Cucumber Pickles.—Cucumber and beet pickles can be kept on tables every day without molding, and without changing the vinegar on them, by adding one teaspoonful of salt to one pint of the liquid.

Ham Omelette.—One full tablespoon of minced ham, two eggs, one tablespoonful of milk, one of minced parsley and one of onion. Beat the eggs thoroughly, mix all together, pour into a small frying pan in which one ounce of butter has been melted; stir till the omelette begins to set; serve very quickly.

Lemon Jelly Cake.—Work half a cupful of butter and one and a half cupfuls of sugar together until creamy; add three cupfuls of sifted flour, two tablespoonfuls baking powder, half a cupful of milk, or cream, and six eggs. Bake in jelly tins. For filling, use a cupful of sugar, two eggs, the juice and grated rind of two lemons. Mix, set on the stove.

Spiced Tomatoes.—Use pear-shaped tomatoes, if possible, prick two or three times with a fork, sprinkle with salt, let stand over night, pack in a glass jar and cover over with the following mixture: One pint of vinegar, one tablespoonful each of ground cloves, cinnamon, allspice, pepper, and one tablespoonful of sugar. The spices should be tied in a thin muslin bag. Let this come to the boiling point, then pour it into jars and seal immediately. This is enough for a half-gallon jar.

Florida Court Calendar.

First Judicial Circuit.

J. E. Wolfe.....Judge.
 J. Walter Kehoe.....State's Attorney.
 Santa Rosa—Last Monday in March and third Monday in September.
 Escambia—Second Monday in April and first Monday in December.
 Holmes—Third Monday after fourth Monday in April and second Monday after first Monday in October.
 Walton—First Monday after fourth Monday in April and first Monday in October.
 Washington—Fifth Monday after fourth Monday in April and fourth Monday after first Monday in October.
 Jackson—Seventh Monday after fourth Monday in April and sixth Monday after first Monday in October.

Second Judicial Circuit.

John W. Malone.....Judge.
 George W. Walker.....State's Attorney.
 Liberty—Second Monday in March and last Monday in September.
 Calhoun—Third Monday in March and first Monday in October.
 Franklin—First Monday after fourth Monday in March and third Monday in October.
 Gadsden—Second Monday after fourth Monday in March and fourth Monday in October.
 Jefferson—Fourth Monday after fourth Monday in March and third Monday after fourth Monday in October.
 Wakulla—Sixth Monday after fourth Monday in March and second Monday after fourth Monday in October.
 Leon—Seventh Monday after fourth Monday in March and fifth Monday after fourth Monday in October.

Third Judicial Circuit.

Bascom H. Palmer.....Judge.
 Cary A. Hardee.....State's Attorney.
 Taylor—Fourth Monday in March and fourth Monday in September.
 Madison—Second Monday in April and second Monday in October.
 Hamilton—Fourth Monday in January and fourth Monday in August.
 Suwannee—Second Monday in May and second Monday in November.
 Columbia—Fourth Monday in April and fourth Monday in October.
 Lafayette—Tuesday after fourth Monday in May and Tuesday after fourth Monday in November.

Fourth Judicial Circuit.

Rhydon M. Call.....Judge.
 Augustus G. Hartridge.....State's Attorney.
 Clay—First Tuesday after second Monday in April and first Tuesday after fourth Monday in October.
 Nassau—Third Monday in April and first Monday in November.
 St. Johns—Fourth Monday in April and second Monday in November.
 Duval—First Tuesday after the first Monday in May and third Monday in November.

Fifth Judicial Circuit.

W. S. Bullock.....Judge.
 Edwin W. Davis.....State's Attorney.
 Sumter—Third Tuesday in March and third Tuesday in October.
 Marion—First Tuesday in May and first Tuesday in December.
 Citrus—First Tuesday in April and first Tuesday in November.

Hernando—Third Tuesday in April and third Tuesday in November.
Lake—First Tuesday in March and first Tuesday in October.

Sixth Judicial Circuit.

J. B. Wall.....Judge.
Herbert S. Phillips.....State's Attorney.
Lee—Fourth Tuesday in February and second Tuesday in November.
DeSoto—First Tuesday in March and fourth Tuesday in October.
Polk—Third Tuesday in March and second Tuesday in October.
Manatee—Fourth Tuesday in March and third Tuesday in November.
Pasco—Second Tuesday in April and first Tuesday in October.
Monroe—Fourth Tuesday in April and fourth Tuesday in November.
Hillsboro'—First Tuesday in May and second Tuesday in December.

Seventh Judicial Circuit.

Minor S. Jones.....Judge.
John C. Jones.....State's Attorney.
Brevard—Fourth Tuesday in March and fourth Tuesday in October.
Volusia—Second Tuesday in April and second Tuesday in November.
Osceola—Fourth Tuesday in April and fourth Tuesday in November.
Orange—Second Tuesday after fourth Tuesday in April and second Tuesday after fourth Tuesday in November.
Dade—First Tuesday in March and first Tuesday in October.
St. Lucie—Third Tuesday in February and third Tuesday in September.

Eighth Judicial Circuit.

J. T. Wills.....Judge.
J. M. Rivers.....State's Attorney.
Levy—Third Monday in March and third Monday in September.
Baker—First Monday in April and first Monday in October.
Putnam—Second Monday in April and second Monday in October.
Bradford—Fourth Monday in April and fourth Monday in October.
Alachua—First Monday in May and second Monday in November.

Supreme Court.

Thomas M. Shackelford.....Chief Justice.
R. Fenwick Taylor.....Associate Justice.
James B. Whitfield.....Associate Justice.
Charles B. Parkhill.....Associate Justice.
Robert S. Cockrell.....Associate Justice.
William A. Hocker.....Associate Justice.
Milton H. Mabry.....Clerk and Librarian.
Jack Mabry.....Deputy Clerk.
Laurie E. Perkins.....Special Clerk to Judges.
Terms for holding court, second Tuesday in January and June.

United States Court Districts.

Northern District.—This district comprises the counties of Escambia, Santa Rosa, Walton, Washington, Holmes, Jackson, Calhoun, Liberty, Franklin, Gadsden, Wakulla, Leon, Jefferson, Taylor, Lafayette and Levy.

Southern District.—This district comprises the counties of Madison, Hamilton, Suwannee, Columbia, Alachua, Baker, Bradford, Nassau, Duval, Clay, St. Johns, Putnam, Volusia, Marion, Citrus, Lake, Hernando, Sumter, Orange, Pasco, Osceola, Brevard, Hillsborough, Polk, Manatee, DeSoto, Lee, Dade, and Monroe.

Postage Rates.

Domestic.

First-Class Matter (Letters, etc.).....	2c. an oz.
Second-Class (Newspapers and Periodicals).....	1c. for 4 oz.
Third-Class (Books, Circulars).....	1c. for 2 oz.
Fourth-Class (Merchandise).....	1c. an oz.
Registration Fee (additional postage).....	.8c.
Immediate Delivery Stamp (additional to regular postage).....	10c.
Money Order (\$1 to \$100).....	3c. to 30c.

First-Class Matter.—Letters and all other written matter (whether sealed or not), excepting manuscript copy accompanying proof sheets; also all matter sealed (see below), 2 cents an ounce, excepting drop letters at Non-Carrier offices, 1 cent an ounce. Postal cards, 1 cent each.

Second-Class.—Newspapers and periodicals, published quarterly and oftener, and not for gratuitous distribution. The general public pay by affixing stamps at the rate of one cent for each 4 ounces or part thereof, when not sealed.

Third-Class.—Books (printed, not blank), circulars, other printed matter, proof sheets and manuscript copy accompanying same, valentines, sheet-music, photographs, heliotypes, chromos, posters, lithographs and printed advertising matter in general—all, when not sealed, 1 cent for 2 ounces or fraction.

Fourth-Class.—Merchandise and samples; blank books and paper; ores; all matter not included in any of the other classes and not in its nature perishable or liable to injure the contents of the mails. (By express ruling the postage on seeds, cuttings, roots, scions and plants is at the rate of 1 cent for each two ounces.) All, when not sealed, and not exceeding 4 pounds in weight, 1 cent an ounce or fraction.

Sealing.—Any matter is regarded as sealed when it is not so wrapped as to allow of a thorough examination without in any way injuring the wrapping.

Registration.—All classes of mail matter may be registered in any Post-office by affixing 8 cents in stamps in addition to the regular postage.

Foreign.

Mail matter may be sent to any foreign country subject to the following rates and conditions:

Registration.—Eight cents additional to ordinary postage on all articles to foreign countries.

On Letters.—Five cents for each ounce or fraction thereof and 3 cents for each additional ounce. Double rates are collected on delivery of unpaid or short-paid letters. Letters to Great Britain and Ireland, 2 cents an ounce or fraction thereof.

Post Cards.—Single, 2 cents each; with paid reply, 4 cents each.

"Private Mailing Cards" (Post Cards).—Two cents each, subject to conditions governing domestic post cards.

On newspapers, books, pamphlets, photographs, sheet-music, maps, engravings, and similar printed matter, 1 cent each two ounces or fraction thereof. Prepayment required at least in part.

Postage to Canada and Mexico.—The general rule is that articles admitted to the domestic mails of either country are admitted at the same postage rates and under the same conditions to the mails exchanged between the two countries; but this rule is subject to important exceptions, not particularized in brief, and it is best to consult the postmaster before entrusting merchandise or any unusual matter to the international mails.

To Sanghai, China.—Letters, 2 cents an ounce or fraction thereof.

Orange Packing.

SWEET ORANGES.

No. and Size 96; Dia. $3\frac{1}{4}$ in.; Layers 4.

Layers 1 and 3—12; Layers 2 and 4—12.

No. and Size 112; Dia. $3\frac{1}{4}$ in.; Layers 4.

Layers 1 and 3—14; Layers 2 and 4—14.

No. and Size 126; Dia. $3\frac{1}{4}$ in.; Layers 5.

Layers 1, 3 and 5—18; Layers 2 and 4—12.

No. and Size 150; Dia. 3 1 16 in.; Layers 5.

Layers 1, 3 and 5—15; Layers 2 and 4—15.

No. and Size 176; Dia. 2 15 16 in.; Layers 5.

Layers 1, 3 and 5—18; Layers 2 and 4—17.

No. and Size 200; Dia. 2 13 16 in.; Layers 5.

Layers 1, 3 and 5—20; Layers 2 and 4—20.

No. and Size 224; Dia. 2 11 16 in.; Layers 6.

Layers 1, 3 and 5—18; Layers 2, 4 and 6—18.

No. and Size 226; Dia. 2 9 16 in.; Layers 5.

Layers 1, 3 and 5—23; Layers 2 and 4—22.

No. and Size 252; Dia. 2 7 16 in.; Layers 6.

Layers 1, 3 and 5—21; Layer 2, 4 and 6—21.

POMELOS.

No. and Size 26; Dia. $3\frac{1}{4}$ in.; Layers 3.

Layer 1 and 3—5; Layer 2—4.

No. and Size 36; Dia. 5 in.; Layers 3.

Layers 1 and 3—6; Layer 2—6.

No. and Size 46; Dia. $4\frac{1}{4}$ in.; Layers 3.

Layers 1 and 3—8; Layer 2—7.

No. and Size 54; Dia. $4\frac{1}{4}$ in.; Layers 3.

Layers 1 and 3—9; Layer 2—9.

No. and Size 64; Dia. $4\frac{1}{4}$ in.; Layers 4.

Layers 1 and 3—8; Layers 2 and 4—8.

No. and Size 72; Dia. $4\frac{1}{4}$ in.; Layers 4.

Layers 1, and 3—9; Layers 2 and 4—9.

No. and Size 80; Dia. 4 in.; Layers 4.

Layers 1 and 3—10; Layers 2 and 4—10.

No. and Size 96; Dia. $3\frac{3}{4}$ in.; Layers 4.

Layers 1 and 3—12; Layers 2 and 4—12.

For Business People.

LANDLORDS AND TENANTS.

Some Useful "Don'ts" Respecting Their Rights and Duties.

- Don't rent property except on written lease.
- Don't depend on the verbal promise of a landlord.
- Don't try to hold back the rent for repairs made by you.
- Don't fail to record a lease when drawn for three years or more.
- Don't move into premises until you get your written lease or agreement.
- Don't leave your landlord trade fixtures erected by you on the premises.
- Don't accept any shorter notice than thirty days when holding by the month.
- Don't look to a landlord for general repairs, unless specially provided for in the lease.
- Don't let premises for illegal use, or arrears of rent upon ejection will not be collectable.
- Don't allow a provision not to sub-let deter you from putting in a tenant of same standing as yourself.
- Don't erect a building upon foundations sunken into the ground, or it will become part of the realty.
- Don't take a married woman for a tenant unless the laws of the state permit her to make an executory contract.
- Don't remove fixture (mantle, tile floor, stationary tubs, etc.), unless you expect to restore the premises as you found them.
- Don't turn the premises over to the landlord until all questions of ownership of fixtures, additions, etc., have been settled in writing.

Quick Interest Computations.

- The following will be found to be excellent rules for finding the interest on any principal for any number of days. When the principal contains cents, point off four places from the right of the result to express the interest in dollars and cents. When the principal contains dollars only, point off two places.
- Four per cent.—Multiply the principal by number of days to run and divide by 90.
- Five per cent.—Multiply by number of days and divide by 72.
- Six per cent.—Multiply by number of days and divide by 60.
- Seven per cent.—Multiply by number of days and divide by 52.
- Eight per cent.—Multiply by number of days and divide by 45.
- Nine per cent.—Multiply by number of days and divide by 40.
- Ten per cent.—Multiply by number of days and divide by 36.
- Twelve per cent.—Multiply by number of days and divide by 30.
- Fifteen per cent.—Multiply by number of days and divide by 24.
- Eighteen per cent.—Multiply by number of days and divide by 20.

INTEREST AT SIX PER CENT.

Time.	\$1	\$2	\$3	\$4	\$5	\$6	\$7	\$8	\$9	\$10	\$100	\$1000
1 Day	0	0	0	0	0	0	0	0	0	0	2	17
3 "	0	0	0	0	0	0	0	0	0	1	5	50
5 "	0	0	0	0	0	1	1	1	1	1	8	83
10 "	0	0	1	1	1	1	1	1	2	2	17	1 67
1 Month	½	1	2	2	3	3	4	4	5	5	50	5 00
2 "	1	2	3	4	5	6	7	8	9	10	1 00	10 00
3 "	½	3	5	6	8	9	11	12	14	15	1 50	15 00
4 "	2	4	6	8	10	12	14	16	18	20	2 00	20 00
6 "	3	6	9	12	15	18	21	24	27	30	3 00	20 00
9 "	4½	9	14	18	23	27	32	36	41	45	4 50	45 00
1 Year	6	12	14	18	30	36	42	48	54	60	6 00	60 00

For 8 per cent. divide by 3 and add in the quotient.

DIGESTION.

Average Time Required for the Digestion of Various Articles of Food.

	Hrs.Min.		Hrs.Min.
Apples, sweet (boiled)	2 30	Lamb (boiled)	2 30
Barley, boiled	2	Milk (raw)	2 15
Beans, Lima (boiled)	2 30	Milk (boiled)	2
Beef (roasted)	3	Mutton (boiled)	3
Beef (fried)	4	Mutton (roast)	3 15
Beef, salt (boiled)	2 45	Oysters (roast)	3 15
Bread	3 30	Oysters (stewed)	3 30
Butter	3 30	Pigs' feet, soused (boiled)	1
Cheese	3 30	Potatoes (baked)	2 30
Chicken (fricasseed)	2 40	Pork, salt (stewed)	3
Custard (baked)	2 45	Pork (roast)	3 15
Duck (roasted)	4	Rice (boiled)	1
Eggs (raw)	3	Sago (boiled)	1 45
Eggs (soft boiled)	3	Soup, barley	1 30
Eggs (hard boiled)	3 30	Soup, chicken, etc. (avg.)	3 15
Eggs (fried)	3 30	Tripe, soused (boiled)	1
Fish	2 44	Turkey (roast)	2 00
Fowl (roast)	4	Veal (boiled)	4
Hashed meat and vegetables	2 30	Veal (fried)	4 30

Warmth and Strength Derived From Various Articles of Food.

	Grains.		Grains.
Beer or Porter	1	Pearl Barley	91
Parsnips	12	Fresh Pork	108
Turnips	12	Seconds Flour	120
Whey	13	Corn Meal	125
Greens	14	Fresh Fish	129
Potatoes	24	Cocoa	130
Skimmed Milk	34	Oatmeal	140
New Milk	35	Mutton	140
Buttermilk	35	Fresh Beef	172
Barley	70	Beef Liver	200
Rice	70	Split Peas	250
Bacon	78	Cheddar Cheese	310
Rye Bread	89	Skim Milk Cheese	360
Bakers' Bread	90		

Grains of Warmth yielded by One Pound of 7,000 Grains.

	Grains.		Grains.
Whey	150	Molasses	2,300
Turnips	238	Skim Milk Cheese	2,350
Beer and Porter	315	Cheddar Cheese	2,550
Buttermilk	335	Seconds Flour	2,700
Skimmed Milk	351	Rye Bread	2,700
New Milk	378	Rice	2,750
Carrots	390	Barley Meal	2,780
Parsnips	425	Indian Meal	2,800
Potatoes	770	Sugar	2,900
Fresh Fish	980	Fresh Pork	3,100
Beef Liver	1,220	Bacon	4,200
Red Herrings	1,455	Butter	4,700
Bakers' Bread	1,590	Lard	4,800
Fresh Beef	2,300	Drippings	5,500

Fat, Water and Muscle Properties of Food.

100 parts.	Water.	Muscle.	Fat.	100 parts.	Water.	Muscle.	Fat.
Cucumbers	97.0	1.5	1.0	Mutton	44.0	12.5	40.0
Turnips	94.4	1.1	4.0	Pork	38.5	10.0	50.0
Cabbage	90.0	4.0	5.0	Beans	14.8	24.0	57.7
Milk, cows	86.0	5.0	8.0	Buckwheat	14.2	8.6	75.4
Apples	84.0	5.0	10.0	Barley	14.0	15.0	68.8
Eggs, yolk of	79.0	15.0	27.0	Corn	14.0	12.0	73.0
Potatoes	75.2	1.4	22.5	Peas	14.0	23.4	60.0
Veal	68.5	10.1	16.5	Wheat	14.0	23.4	69.0
Eggs, white of	53.0	17.0	.0	Oats	13.6	17.0	66.4
Lamb	50.5	11.0	35.0	Rice	13.5	6.5	79.5
Beef	50.0	15.0	30.0	Cheese	10.0	6.5	19.0
Chicken	46.0	18.0	32.0	Butter			19.0

Number of Plants for an Acre of Ground.

Dist. apart.	No. of Plants.	Dist. apart.	No. of Plants.
3 inches by 3 inches	696,960	6 feet by 6 feet	1,210
4 inches by 4 inches	392,040	6½ feet by 6½ feet	1,031
5 inches by 6 inches	174,240	7 feet by 7 feet	881
9 inches by 9 inches	77,440	8 feet by 8 feet	680
1 foot by 1 foot	43,560	9 feet by 9 feet	537
1½ feet by 1½ feet	19,360	10 feet by 10 feet	435
2 feet by 1 foot	21,780	11 feet by 11 feet	360
2 feet by 2 feet	10,890	12 feet by 12 feet	301
2½ feet by 2½ feet	6,960	13 feet by 13 feet	257
3 feet by 1 foot	14,520	14 feet by 14 feet	222
3 feet by 2 feet	7,260	15 feet by 15 feet	139
3 feet by 3 feet	4,840	16 feet by 16 feet	170
3½ feet by 3½ feet	3,555	16½ feet by 16½ feet	160
4 feet by 1 foot	10,890	17 feet by 17 feet	150
4 feet by 2 feet	5,445	18 feet by 18 feet	134
4 feet by 3 feet	3,630	19 feet by 19 feet	120
4 feet by 4 feet	2,722	20 feet by 20 feet	108
4½ feet by 4½ feet	2,151	25 feet by 25 feet	69
5 feet by 1 foot	8,712	30 feet by 30 feet	48
5 feet by 2 feet	4,356	33 feet by 33 feet	40
5 feet by 3 feet	2,904	40 feet by 40 feet	27
5 feet by 4 feet	2,178	50 feet by 50 feet	17
5 feet by 5 feet	1,417	60 feet by 60 feet	12
5½ feet by 5½ feet	1,417	66 feet by 66 feet	10

Quantity of Seeds Required per Acre.

Wheat	1½ to 2 bush.	Blue grass	2 bush.
Rye	2½ "	Beets	3 lbs.
Oats	3 "	Carrots	2 "
Barley	2 "	Ruta bagas	¾ "
Peas	2 to 3 "	Millet	½ bush.
White beans	1½ "	Clover, white	4 qrts.
Buckwheat	½ "	Clover, red	8 "
Corn, broadcast	4 "	Timothy	6 "
Corn in drills	2 "	Orchard grass	2 bush.
Corn in drills	2 to 3 "	Red top	1 to 2 pks.
Corn in hills	4 to 8 qrts.	Mixed lawn grass	1 to 2 "
Broom corn	½ bush.	Tobacco	2 oz.
Potatoes	10 to 15 bush.		

*Power of Locomotion of Animals and Average Velocity of
Various Bodies.*

	Per hour	Per sec.
A man walks	3 miles, or	4 feet.
A horse trots	7 " or	10 "
A horse runs	20 " or	29 "
Steamboat runs	18 " or	26 "
Sailing vessel runs	10 " or	14 "
Slow rivers flow	3 " or	4 "
Rapid rivers flow	7 " or	10 "
A moderate wind blows	7 " or	10 "
A storm moves	36 " or	52 "
A hurricane moves	80 " or	117 "
A rifle ball moves	1,000 " or	1,466 "
Sound moves	743 " or	1,142 "
Light moves	192,000 miles	per second.
Electricity moves	288,000 miles	per second.

Weights of Cordwood.

One cord.	Lbs.	Carbon.	One cord.	Lbs.	Carbon.
Hickory	4,468	100	Canada Pine	1,870	42
Hard Maple	2,864	58	Yellow Oak	2,920	61
Beech	3,234	64	White Oak	1,870	81
Ash	3,449	79	Lombardy Poplar	1,775	41
Birch	2,368	49	Red Oak	3,255	70
Pitch Pine	1,907	43			

Time in Which Money Doubles at Interest.

10	10 years,	days	7 years,	100 days	4½	22	"	81 days	15	"	273	"
9	11	" 40	8	" 60	4	25	"		17	"	246	"
8	12½	"	9	"	3½	28	"	208 days	20	"	54	"
7	14	" 104	10	" 89	3	33	"	3 ms's.	23	"	164	"
6	16	" 8 mo's.	11	" 327	2½	40	"		28	"	26	"
5	20	"	14	" 60	2	50	"		35	"	1	"

Phosphate Production in 1906.

Total output...	2,080,957	Value 8,579,437	S. Carolina	"	223,675	Value 817,068
Florida produced	1,304,505	Value 5,585,578	Other States	"	5,100	Value 28,800
Tennessee	"	547,677	Value 2,147,991	(U. S. Geo. Surv. Press Bul. 295, folio.)		

Free Advice to Our Friends.

We will take pleasure at any time in giving our friends throughout Florida the benefit of our experience in the matter of fertilizers suited to certain soils. Our Mr. Painter has had many years of practical experience, not only in the matter of orange culture, but in growing vegetables both for home use and the markets. Drop a letter to the E. O. Painter Fertilizer Company of Jacksonville, stating the information desired, and the same will be immediately forthcoming.

Help in Case of Accidents.

Drowning. 1. Loosen clothing, if any. 2. Empty lungs of water by laying body on its stomach, and lifting it by the middle so that the head hangs down. Jerk the body a few times. 3. Pull tongue forward, using handkerchief, or pin with string, if necessary. 4. Imitate motion of respiration by alternately compressing and expending the lower ribs, about twenty times a minute. Alternately raising and lowering the arms from the sides up above the head will stimulate the action of the lungs. Let it be done gently but persistently. 5. Apply warmth and friction to extremities. 6. By holding tongue forward, closing the nostrils, and pressing the "Adam's apple" back (so as to close entrance to stomach), direct inflation may be tried. Take a deep breath and breathe it forcibly into the mouth of patient, compress the chest to expell the air, and repeat the operation. 7 **DON'T GIVE UP!** People have been saved after hours of patient, vigorous effort. 8. When breathing begins, get patient into a warm bed, give warm drinks, or spirits in teaspoonfuls, fresh air and quiet.

Burns and Scalds. Cover with cooking soda and lay wet cloths over it. Whites of eggs and olive oil. Olive oil or linseed oil, or mixed with chalk or whiting. Sweet or olive oil and lime-water.

Lightning. Dash cold water over a person struck.

Sunstroke. Loosen clothing. Get patient into shade and apply ice-cold water to head. Keep head in elevated position.

Mad Dog or Snake Bite. Tie cord tight above the wound. Suck the wound

and cauterize with caustic white-hot iron at once, or cut out adjoining part with a sharp knife. Give stimulants, as whiskey, brandy, etc.

Stings of Venomous Insects, etc. Apply weak ammonia, oil, salt water or iodine.

Fainting. Place flat on back; allow fresh air, and sprinkle with water. Place head lower than rest of body.

Tests of Death. Hold mirror to mouth. If living, moisture will gather. Push pin into flesh. If dead the hole will remain, if alive it will close up. Place fingers in front of a strong light. If alive they will appear red; if dead, black or dark. If a person is dead decomposition is almost sure to set in after 72 hours have elapsed. If it does not, then there is room for investigation by the physician.

Cinders in the Eye. Roll soft paper up like a lamplighter, and wet the tip to remove, or use a medicine dropper to draw it out. Rub the other eye.

Fire in One's Clothing. Don't run—especially not downstairs or out of doors. Roll on carpet or wrap in woolen rug or blanket. Keep the head down, so as not to inhale flame.

Fire from Kerosene. Don't use water, it will spread the flames. Dirt, sand, or flour is the best extinguisher, or smother with woolen rug, table-cloth or carpet.

Suffering from Inhaling Illuminating Gas. Get into the fresh air as soon as possible and lie down. Keep warm. Take ammonia—twenty drops to a tumbler of water at frequent intervals; also, two or four drops tincture of nux vomica every hour or two for five or six hours.

Special Fertilizers for Special Crops.

Consumers of fertilizers should bear in mind that best results for special crops can be obtained by the use of special fertilizers. We were the first manufacturers to make special fertilizers for special crops. Let us know your needs and we will furnish the fertilizers from formulae made especially to meet your requirements.

Business Law in Daily Use.

The following compilation of business law contains the essence of a large amount of legal verbiage:

If a note is lost or stolen, it does not release the maker; he must pay it if the consideration for which it was given and the amount can be proven.

Notes bear interest only when so stated.

Each individual in a partnership is responsible for the whole amount of the debts of the firm, except in cases of special partnership.

Ignorance of law excuses no one.

The law compels no one to do impossibilities.

An agreement without consideration is void.

A note made on Sunday is void.

Contracts made on Sunday cannot be enforced.

A note by a minor is void.

A contract made with a minor is void.

A contract made with a lunatic is void.

A note obtained by fraud, or from a person in a state of intoxication, cannot be collected.

Signatures made with a lead pencil are good in law.

A receipt for money is not always conclusive.

The acts of one partner bind all the rest.

The maker of an "accommodation" bill or note (one for which he has received no consideration, having lent his name or credit for the accommodation of the holder) is not bound to the person accommodated, but is bound to all other parties, precisely as if there was a good consideration.

It is a fraud to conceal a fraud.

No consideration is sufficient in law if it be illegal in its nature.

Checks or drafts must be presented for payment without unreasonable delay.

If the drawee of a check or draft has changed his residence, the holder must use due or reasonable diligence to find him.

If one who holds a check as payee or otherwise, transfers it to another, he has a right to insist that the check be presented that day, or at the farthest, on the day following.

A note indorsed in blank (the name of the indorser only written) is transferable by delivery, the same as if made payable to bearer.

Comparative Yields of Various Grains, Vegetables and Fruits.

	Lbs. per acre.		Lbs. per acre.
Hops	442	Grass	7,000
Wheat	1,260	Carrots	6,800
Barley	1,600	Potatoes	7,500
Oats	1,840	Apples	8,000
Peas	1,920	Turnips	8,420
Beans	2,000	Clinque foil grass	9,600
Plums	2,000	Vetches, green	9,800
Cherries	2,000	Cabbage	10,900
Onions	2,800	Parsnips	11,200
Hay	4,000	Mangel Wurzel	22,000
Pears	5,000		

Percentage of Alcohol in Various Liquors.

Scotch Whiskey	54.53	Currant Wine	20.50
Irish Whiskey	53.9	Port	22.90
Rum	53.68	Maderia	22.27
Gin	51.6	Teneriffe	19.79
Brandy	53.39	Sherry	19.17
Burgundy	14.57	Claret	15.1
Cape Muscat	18.25	Elder	8.79
Champagne (still)	13.80	Ale	6.87
Champagne (sparkling)	12.61	Porter	4.02
Cider	5.2 to 9.8	Malaga	17.26
		Rhenish	12.8

Antidotes for Poison.

First. Send for a physician.

Second. Induce vomiting, by tickling throat with feather or finger. Drink hot water or strong mustard and water. Swallow sweet oil or whites of eggs.

Acids and antidotes for alkalies, and vice versa.

Special Poisons and Antidotes.

Acids, muriatic, oxalic, acetic, sulphuric (oil of vitrol), nitric (aqua-fortis). Soap-suds, magnesia, lime-water.

Prussic Acid. Ammonia in water, Dash water in face.

Carbolic Acid. Flour and water, mucilaginous drinks.

Alkalies. Such as potash, lye, hartshorn, ammonia. Vinegar or lemon juice in water.

Arsenic, Rat Poison, Paris Green. Milk, raw eggs, sweet oil, lime-water, flour and water.

Bug Poison, Lead, Saltpetre, Corrosive

sublimate, sugar of lead, Blue Vitrol. Whites of eggs or milk in large doses.

Chloroform, Chloral, Ether. Dash cold water on head and chest. Artificial respiration. Piece of ice in rectum. No chemical antidote.

Carbonate of Soda, Copperas, Cobalt. Soap-suds and mucilaginous drinks.

Iodine, Antimony, Tartar Emetic. Starch and water. Astringed infusions. Strong tea, tannin.

Mercury and its Salts. Whites of eggs, milk, mucilages.

Nitrate of Silver, Lunar, Caustic. Salt and water.

Opium, Morphine, Laudanum, Paregoric, Soothing Powders, or Syrups. Strong coffee, hot bath. Keep awake and moving at any cost.

Strychnine, Tincture or Nux Vomica. Mustard and water, sulphate of zinc. Absolute quiet. Plug the ears.

Rules in Case of Fire.

Crawl on the floor. The clearest air is the lowest in the room. Cover head with woolen wrap, wet if possible. Cut holes for the eyes. Don't get excited.

Ex-Chief Bonner, of the New York Fire Department, gives the following rules applying to houses, flats, hotels, etc.

Familiarize yourself with the location of hall windows and natural escapes. Learn the location of exits to roofs of adjoining buildings. Learn the position of all stairways, particularly the top landing and scuttle to the roof. Should you hear cry of "fire," and column of smoke fill the rooms, above all KEEP COOL. Keep the doors of rooms shut. Open windows from the top. Wet a towel, stuff it in the mouth, breathe through it instead of the nose, so as not to inhale smoke. Stand at the window and get the benefit of the outside air. If room fills with smoke keep close to

floor and crawl along by the wall to the window.

Do not jump unless the blaze behind you is scorching you. Do not even then if the firemen with scaling ladders are coming up the building or are near. Never go to the roof, unless as a last resort and you know there is escape from it to the adjoining buildings. In big buildings fire always goes to the top. Do not jump through the flame within a building without first covering the head with a blanket or heavy clothing and gauging the distance. Don't get excited; try to recall the means of exit, and if any firemen are in sight DON'T JUMP.

If the doors of each apartment, especially in the lower part of the house, were closed every night before the occupants retired, there would be no such rapid spread of flames.

Poultry Supplies

When we commenced to handle these supplies it was to accommodate a few of our customers who were raising poultry for home use, but were located so that they could not get these supplies handily. This trade has grown so that we now order our poultry supplies in car lots, and we ship to every part of Florida and into Southern Georgia. The Beef Scrap and Meat Meal have a most marvelous sale, and furnish that part of the fowls' diet that is hard to get---protein

HERE IS WHAT WE OFFER

Beef Scrap, per lb	- - - - -	3 1-2 cts
Meat Meal, per lb	- - - - -	3 cts
Dried Blood, especially for poultry, per lb	- - - - -	3 cts
Coarse Cracked Bone, extra quality, per lb	- - - - -	2 1-2 cts
Mica Grit (Crushed Granite), for hen, per lb	- - - - -	1 ct
Mica Grit (Crushed Granite), for little chicks, per lb	- - - - -	1 ct
Crushed Oyster Shell, best, no dirt, 100 lbs	- - - - -	75 cts
Tobacco Dust, (Insecticide), per lb	- - - - -	3 cts
Charcoal, (Coarse Grain, for poultry), (50 lb bag), per lb	- - - - -	3 1-2 cts

All poultry supply prices f. o. b. Jacksonville, Fla., net cash. On orders amounting to over \$4.00, accompanied by cash, we allow 5 per cent discount

Above tells you what we handle in this line. Nothing but the best, and prompt shipment and fresh stock guaranteed. Try us with your order, no matter how small it will be appreciated

THE E. O. PAINTER FERTILIZER CO.,
Jacksonville, Florida

DEATH DOPE

MEANS DEATH TO WHITE FLY
larvae and eggs

DEATH TO SCALE INSECTS

DEATH TO ALL FUNGUS
enemies

There are many insecticides on the market that kill the white fly when sprayed on the fly, but do not affect the larvae or eggs.

DEATH DOPE

Kills the Fly, Larvae and Eggs

A Government Expert

recently examined a grove that had been sprayed with **DEATH DOPE** and reported that the percentage of extermination equaled more than 99½ per cent. **DEATH DOPE** is sure death to all forms of Fungus growth that injure the orange trees. Use it and have clean fruit, free from wither tip, so-called "ammonia spots and rust."

Free From White Fly and Wither Tip

TESTIMONIALS

LARGO, FLA., Oct. 24, 1908.

DEAR SIR:—I have been spraying for three times with your insecticide and now find my trees are entirely cleaned up. I have no white fly nor live eggs nor scale on my trees or fruit. I have orders for more which I hope you will send me at once. My grove has been looked at by at least fifty people who are pleased with it. Yours very truly,

(Signed) F. N. CAMPBELL.

SUTHERLAND, FLA., Oct. 24, 1908.

DEAR SIR:—After having carefully examined trees that have been sprayed with your insecticide, I am convinced you have a preparation very effective against the white fly larvae in all stages and knowing of what the insecticide is composed, I feel sure it is absolutely harmless to the trees.

Yours truly,

(Signed) FRANCIS L. WILLS.

DIRECTIONS:—One gallon of **Death Dope** to fifty gallons of water. Spray thoroughly before new growth starts in the spring.

PRICE:—70 cents per gallon in barrel lots.

MANUFACTURED BY

E. O. PAINTER FERTILIZER CO.
JACKSONVILLE, FLORIDA