

THE  
CANADIAN FARMERS AND MECHANICS'  
**ALMANAC**  
FOR  
**1847,**

BEING THE THIRD AFTER LEAP YEAR.



CONTAINING DISCRPTIONS, ILLUSTRATED WITH BEAUTIFUL AND  
CORRECT DRAWINGS, OF A NUMBER OF THE MOST APPEAL-  
VED FARMING IMPLEMENTS, BUILDINGS, CATTLE,  
&C. &C. TOGETHER WITH A VARIETY OF  
OTHER USEFUL AND INTER-  
ESTING MATTER.



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## ECLIPSES FOR 1847.

There will be four eclipses during the present year; two of the sun, and two of the moon; none of which will be visible on the Continent of America.

I. The moon will be partly eclipsed on the 31st day of March, at 4 o'clock and 7 minutes, P. M., and will be visible throughout the Eastern Continent.

II. There will be a total eclipse of the sun, April 15th, at 1h. and 12m. morning. The path of the total phase will pass curvilinearly, first north of east, then south of east, over the southern part of Africa and the Indian Ocean.

III. The moon will be partly eclipsed Sept. 24th, at 9h. and 16m. morn., visible in the eastern part of Asia and Pacific Ocean.

IV. An annular eclipse of the sun will be visible through the interior of Europe and Asia, on the 9th day of October, at 3h. 57m. morning.

## SIGNS OF THE ZODIAC.

♈ Head and face.	♎ Reins.
♉ Neck.	♏ Secrets.
♊ Arms.	♐ Thighs
♋ Breast.	♑ Knees.
♌ Heart.	♒ Legs.
♍ Bowels.	♓ Feet.

## CHRONOLOGICAL CYCLES.

Dominical Letter,	C
Golden Number,	5
Solar Sytle,	8
Epact,	41
Roman Indiction,	5
Julian Period,	6560

## EQUINOXES AND SOLTICES.

Vernal Equinox, Mar. 20, 0h. 12m. A.M.  
Sum'r Solstice, June 20, 9h. 10m. P.M.  
Aut. Equinox, Sept. 22, 11h. 24m. A.M.  
Winter Solstice, Dec. 21, 6h. 52m. P.M.

Venus will be evening star until Oct. 2nd, when at 9h. and 54m. morn., it will be in inferior conjunction with the sun, the planet's right ascension at that time, 12h. 33m. 25s. S., and its declination 11h. 31m. 36s. S., then morning star to the end of the year.

The Moon will run highest this year about the 26o of (♊,) Sagittarius, and lowest about the 26o of (♑,) Sagittarius.

The sun and moon rise and set at the same moment by the Clock or Almanac, on a line running due east and west. Thus: If on any day, the sun or moon rises at Boston, at 20 minutes past 6 o'clock, it rises at 20 minutes past 6 on the same line of latitude westward, or throughout the States and Territories to the Pacific Ocean.

## MOVEABLE FEASTS.

Easter Sunday,	April	4
Rogation Sunday,	May	9
Ascension Day,	May	13
Whit Sunday,	May	23
Trinity Sunday,	May	30
Advent Sunday,	November	28

## OLD STYLE AND NEW STYLE.

POPE GREGORY XIII. made a reformation of the Calendar. The Julian Calendar (or Old Style) had, before that time, been in general use all over Europe. The year, according to the Julian Calendar, consists of 365 days and 6 hours, which 6 hours being 1/4 part of a day, the common years consisted of 365 days: and every fourth year one day was added to the month of February, which made each of these years consist of 366 days, commonly called leap years.

This computation (though near the truth) is more than the Solar year by 11 minutes and 3 seconds, which in 131 years amount to a whole day; by which the vernal equinox was anticipated ten days from the time of the general council of Nice, held in the year 325 of the Christian era, to the time of Pope Gregory, who therefore caused 10 days to be taken out of the month of Oct., 1582, to make the equinox fall on the 21st of March, as it did at the time of that council, and to prevent the like variation for the future, he ordered that 3 days should be abated in every 400 years, by reducing the leap year at the close of each century, for three successive centuries to common years, and retaining the leap year at the close of each fourth century only. This, at that time, was esteemed as exactly conformable to the true solar year. But since that time, the true solar year is found to consist of 365 days, 5 hours, 48 minutes, and 49 seconds, which in 50 centuries will make another day's variation.

1847

FIRST MONTH. JANUARY.

31 DAYS.

## MOON'S PHASES.

Full Moon, 1d 9h 33m morn  
 Last Quarter, 9d 1h 31m even  
 New Moon, 16d 7h 35m even  
 First Quarter 23d 11h 8m morn  
 Full Moon, 31d 3h 19m morn

## SUN ON MERIDIAN.

1d 0h 4m 44s  
 9d 0h 7m 47s even  
 16d 0h 10m 24s  
 23d 0h 12m 25s  
 31d 0h 13m 58s

M	W	Celestial Phenomena, Aspects, &c.	Decl.	ris	sets.	s'th.	p.	R.	S.
1	Fri.	Moon in Perigee.	22 57 7	33 4	27	morn.	☾	ris	
2	Sat.		22 51 7	32 4	28 1	18	☾	6	24
3	C	Snow may be expected	22 45 7	31 4	29 2	8		7	26
4	Mo.		22 39 7	30 1	30 2	52		8	22
5	Tu.	☿ south 9h 22 eve.	22 32 7	29 4	31 3	35	☿	9	20
6	We.		22 25 7	28 4	32 4	17		10	16
7	Th.	Clear and cold.	22 17 7	27 4	33 4	59	☽	11	10
8	Fri.	☽ ☾	22 9 7	26 4	34 5	42		morn	
9	Sat.		22 1 7	25 4	35 6	26		1	4
10	C	Mild and pleasant.	21 51 7	24 4	36 7	13	☿	2	3
11	Mo.		21 42 7	23 4	37 8	2		3	4
12	Tu.	Aldebaran south, 9h 2m	21 32 7	22 4	38 8	53	♀	4	4
13	We.	[eve.	21 21 7	21 4	39 9	48		5	1
14	Th.	Snow with occasional	21 11 7	20 4	40 10	42	☿	5	53
15	Fri.	rains.	20 59 7	20 4	40 11	41		6	47
16	Sat.	Remarkably fine	20 48 7	19 4	41	even.	☿	sets.	
17	C	and pleasant for	20 36 7	18 4	42 0	44		5	50
18	Mo.	the season.	20 24 7	17 4	43 1	41	☿	7	9
19	Tu.		20 11 7	16 4	44 2	38		8	20
20	We.	Capella south, 8h. 53m.	19 58 7	15 4	45 3	32	♀	9	30
21	Th.	[eve.	19 44 7	15 4	45 4	25		10	39
22	Fri.		19 30 7	14 4	46 5	17	☿	11	47
23	Sat.	♀ in Aphelon.	19 16 7	13 4	47 6	9		morn	
24	C		19 2 7	12 4	48 7	2		0	55
25	Mo.		18 47 7	11 4	49 7	54	☿	2	1
26	Tu.	More snow.	18 32 7	10 4	50 8	45		3	5
27	We.		18 16 7	9 4	51 9	36	☿	4	3
28	Th.	Windy.	18 0 7	8 4	52 10	27		4	53
29	Fri.	Cloudy and damp.	17 44 7	7 4	53 11	10	☿	5	6
30	Sat.		17 27 7	6 4	54	morn.		5	54
31	C	☿ stationary.	17 11 7	4 4	56 0	48		ris	

## CIRCLE OF HUMANITY.

family; and mankind better than  
 Fenelon was accustomed to say, my country: for I am more a Fench-  
 "I love my family better than my-man than a Fenelon; and more a  
 self; my country better than my-man than a Frenchman.—Tatler.

1847 SECOND MONTH. FEBRUARY. 28 DAYS.

MOON'S PHASES.				SUN ON MERIDIAN.					
Last Quarter, 8d 8h 29m morn				8d	0h	14m	37s		
New Moon, 15d 6h 17m morn				15d	0h	15m	30s		
First Quarter, 21d 10h 5m even				21d	0h	13m	25s		
M	W	Celestial Phenomena, Aspects, &c.		Decl.	rises	sets	s th.	p.	R. S.
1	Mo.			16 53 7	3 4 57	1 31	ny		6 22
2	Tu.	Regil south, 7h 16m even.		16 36 7	2 4 58	2 14			7 25
3	We.			16 18 7	1 4 59	3 6	—		8 38
4	Th.	Warmer.		16 06 59	5 1 3	42			9 40
5	Fri.	♀ in greatest latitude		15 42 6	58 5 2	4 22			10 42
6	Sat.	[south.		15 23 6	57 5 3	5 5	η		11 43
7	C	♄ south, 6h 6m even.		15 55 56	5 4 5	53			morn
8	Mo.			14 46 6	55 5 5	6 42	†		44
9	Tu.	Cold winds with		14 26 6	54 5 6	7 33			1 44
10	We.	occasional snows.		14 76 52	5 8 8	28			2 42
11	Th.			13 47 6	51 5 9	9 25	VS		3 39
12	Fri.			13 27 6	50 5 10	10 24			4 35
13	Sat.	Quite moderate with		13 76 48	5 12 11	22	~		5 30
14	C	signs of rain.		12 46 6	47 5 13	even.			6 25
15	Mo.			12 26 6	46 5 14	20	⋈	sets	
16	Tu.			12 56 44	5 16 1	18			6 34
17	We.	☉ in ♏		11 44 6	43 5 17	2 13	8		7 45
18	Th.	Warm and fine.		11 22 6	42 5 18	3 8			8 50
19	Fri.			11 16 40	5 20 4	4	γ		9 59
20	Sat.	Dog star south, 8h 21m		10 39 6	38 5 22	4 58			11 9
21	C	[south		10 18 6	37 5 23	5 49	II	morn	
22	Mo.			9 56 6	35 5 25	6 42			13
23	Tu.	Remarkably fine wea.		9 34 6	34 5 26	7 34	☽		1 14
24	We.	[ther.		9 12 6	33 5 27	8 23			2 12
25	Th.	♄ south, 6h 0m even.		8 49 6	31 5 29	9 12			3 10
26	Fri.			8 27 6	30 5 30	10 2	♌		4 5
27	Sat.	A good fall of snow may		8 46 28	5 32 10	48			4 59
28	C	now be looked for.		7 42 6	26 5 34	11 30	♍		5 52

THE WIFE'S UNIVERSAL RIVAL.

It must ever be borne in mind that man's love, even in its happiest exercise, is not like woman's; for while she employs herself through every hour in fondly weaving one beloved image into all her thoughts, he gives to her comparatively few of his; and of these, perhaps neither the loftiest nor the best. \* \* It is a wise beginning, then, for every married woman to make up her mind to be forgotten through the greater part of every day; to make up her mind to many rivals, too, in her husband's attentions, though not in his love; and among these I would mention one whose claims it is folly to dis-

1847

THIRD MONTH. MARCH.

31 DAYS.

## MOON'S PHASES.

Full Moon, 1d 9h 51m even.  
 Last Quarter, 9d 11h 29m even.  
 New Moon, 16d 4h 1m even.  
 First Quarter, 23d 0h 41m even.  
 Full Moon, 31d 4h 7m even.

## SUN ON MERIDIAN.

1d 0h 12m 35s  
 9d 0h 10m 43s  
 16d 0h 8m 45s  
 23d 0h 6m 38s  
 31d 0h 4m 9s

M	W	Celestial Phenomena, Aspects, &c.	Decl.	ris	sets	st'h.	p.	R. S.
1	Mo.	Quite moderate with	7 19 6	24 5	36	morn	☾	rises
2	Tu.	indications of rain.	6 56 6	23 5	37	55		6 40
3	We.		6 33 6	22 5	38	1 38	☽	7 43
4	Th.	☉ in ♈	6 10 6	20 5	40	2 20		8 46
5	Fri.	Mild and damp.	5 47 6	19 5	41	3 4	☾	9 50
6	Sat.		5 23 6	18 5	42	3 50		10 53
7	C	Castor s'th, 7h 12m even.	5 06 17	5 43	4 38			11 53
8	Mo.		4 27 6	15 5	44	5 25	†	morn
9	Tu.	A protracted storm of	4 13 6	14 5	46	6 18		50
10	We.	rain and snow at hand.	3 50 6	13 5	47	7 11	☾	1 50
11	Th.		3 26 6	11 5	49	8 8		2 44
12	Fri.	Cold, windy, and disa-	3 36 10	5 50	9 3	☾		3 30
13	Sat.	greeable weather.	2 39 6	8 5	52	9 59		4 10
14	C.	☿ greatest elongation.	2 15 6	7 5	53	10 57	☿	4 50
15	Mo.		1 52 6	5 5	55	11 54		5 28
16	Tu.		1 28 6	4 5	56	even.	☿	sets
17	W.	☉ in ♈	1 46 3	5 57	50			6 56
18	T.	Now look for a thaw.	0 40 6	2 5	58	1 46	☿	7 59
19	Fri.		☉ 17 6	1 5	59	2 41		9 3
20	Sat.	☉ enters ♈ at 1h 24 m	N 6 6	6	3 37	☾		10 6
21	C	morn.	0 30 5	59 6	1 4	32		11 3
22	Mo.		0 53 5	58 6	2 5	26		11 59
23	Tu.	Continued pleasant wea-	1 17 5	57 6	3 6	19	☾	morn
24	We.	ther. with occasional rain	1 41 5	56 6	4 7	9		57
25	Th.		2 45 5	54 6	6 7	57	☾	1 52
26	Fri.		2 28 5	53 6	7 8	46		2 44
27	Sat.	☿ rises 5h 52m. morn.	2 51 5	52 6	8 9	27	☾	3 39
28	C		3 14 5	50 6	10 10	12		4 30
29	Mo.	Warm.	3 38 5	48 6	12 10	55		5 20
30	Tu.	Regulus south, 9 h 25m	4 15 4	6 14	11 37	☽		6
31	We.	even.	4 24 5	45 6	15 morn			rises

pute, since no remonstrances or rep- ing interest some wives are weak  
 resentations on her part will ever be enough to evince a sort of childish  
 able to render less attractive the jealousy, when they ought rather to  
 charms of this competitor. I mean, congrtulate themselves that their  
 the the newspaper, of whose absorb- most formidable rival is one of paper.

1847

FOURTH MONTH. APRIL.

30 DAYS.

MOON'S PHASES.			SUN ON MERIDIAN.						
Last Quarter, 8d 10h 17m morn.			8d	0h	1m	47s			
New Moon, 15d 1h 12m morn.			15d	11h	59m	55s			
First Quarter, 22d 4h 0m morn.			22d	11h	58m	19s			
Full Moon, 30d 8h 17m morn.			30d	11h	56m	57s			
M	W	Celestial Phenomena, Aspects, &c.	Decl.	rises	sets.	s'th	p.	R	S.
1	Th.		4 47	5 43	6 17	1 8	☾	7	26
2	Fri.	Spica south, 0h 29m morn	5 10	5 42	6 18	1 46	☾	8	33
3	Sat.		5 33	5 41	6 19	2 34		9	37
4	C	A rain storm may be expected.	5 56	5 39	6 21	3 22	†	10	37
5	Mo.		6 19	5 38	6 22	4 13		11	32
6	Tu.		6 42	5 37	6 23	5 6	☾	morn	
7	We.	☿ sets, 11h 14m even.	7 45	5 35	6 25	5 59			23
8	Th.		7 26	5 34	6 26	6 54		1	10
9	Fri.	♂ ♂ ☉ and 60 18s.	7 49	5 32	6 28	7 48	☾	1	58
10	Sat.		8 11	5 31	6 29	8 43		2	46
11	C	Showers.	8 33	5 30	6 30	9 36	☾	3	41
12	Mo.		8 55	5 28	6 32	10 32		4	36
13	Tu.		9 16	5 26	6 34	11 28	☿	5	10
14	We.	☿ Stationary.	9 38	5 25	6 35	even.		5	48
15	Th.		9 59	5 23	6 37	24	☾	sets	
16	Fri.	☉ eclipsed, invisible.	10 21	5 22	6 38	1 22		7	46
17	Sat.		10 42	5 20	6 40	2 17	☿	8	51
18	C.		11 35	5 19	6 41	3 14		9	52
19	Mo.	Clear and cool.	11 23	5 18	6 42	4 8	☾	10	54
20	Tu.		11 44	5 17	6 43	5 1		11	50
21	We.		12 45	5 15	6 45	5 52	☾	morn	
22	Th.	♀ ♂ ☿ and 10 56 north.	12 24	5 14	6 46	6 39			40
23	Fri.		12 44	5 12	6 48	7 24		1	26
24	Sat.	† rises 1h 4m morn.	13 45	5 11	6 49	8 8	☿	2	11
25	C		13 24	5 10	6 50	8 50		2	56
26	Mo.	Pleasant and warm with occasional showers.	13 43	5 8	6 52	9 33	☾	3	30
27	Tu.		14 25	5 7	6 53	10 15		4	10
28	We.		14 21	5 6	6 54	10 58		4	51
29	Th.	Arectus south, 11h 40m	14 39	5 5	6 55	11 43	☾	5	33
30	Fri.	[even.]	14 56	5 3	6 57	morn.		rises	

THINGS THAT DO NOT LOOK WELL.

It does not look well to keep the  
 We find the following in the Prai- horse in the stable not cleaned, till  
 rie Farmer, a backwoods newspaper, his hind feet are 45 degrees higher  
 It does not look well for a man to than his fore feet, so that he is oblig-  
 thump and abuse his horse or oxen, ed to rear up to get himself on a  
 just to try his whip; or to suffer level, every time he wishes to swal-  
 his boys to do so. low a little hay or oats.

1847

FIFTH MONTH. MAY.

31 Days.

## MOON'S PHASES.

Last Quarter, 7d 5h 40m even.

New Moon, 14d 10h 18m morn.

First Quarter, 21d 8h 47m even.

Full Moon, 29d 9h 37m even.

## SUN ON MERIDIAN.

7d 11h 56m 16s

14d 11h 56m 0s

21d 11h 56m 12s

29d 11h 56m 59s

M	W	Celestial Phenomena, Aspects, &c.	Decl.	rises	sets.	st'h	p.	R. S.
1	Sat.	♂ ♀ ☿	15 16 5	2 6 58	1 19	†	8	1
2	C		15 34 5	1 6 59	2 10		9	3
3	Mo.	Antarus south, 2h 37m	15 51 5	7 0	3 2		10	4
4	Tu.	[morn.	16 9 4	59 7	1 5 57	WS	10	59
5	We.	♀ Perherion.	16 26 4	58 7	2 4 49		11	56
6	Th.		16 42 4	56 7	4 5 43	W	morn	
7	Fri.	Thunder and Lightning	16 59 4	55 7	5 6 36		41	
8	Sat.		17 15 4	54 7	6 7 29	⋈	1	22
9	C	Continued rain for se-	17 31 4	53 7	7 8 22		2	7
10	Mo.	veral days.	17 47 4	51 7	9 9 15	γ	2	52
11	Tu.		18 2 4	50 7	10 10 9		3	36
12	We.	♂ ♀ ☿	18 17 4	49 7	11 11 4	8	4	19
13	Th.		18 32 4	48 7	12 11 59		4	57
14	Fri.	♂ south, 6h 27m morn.	18 46 4	47 7	13 even.	II	sets	
15	Sat.		19 1 4	46 7	14 58		8	28
16	C.	♂ ♀ ☿	19 14 4	45 7	15 1 54	☽	9	34
17	Mo.	Pleasant.	19 28 4	44 7	16 2 49		10	39
18	Tu.	Spica south 9h 35m even.	19 41 4	43 7	17 3 41		11	39
19	W.		19 54 4	42 7	18 3 32	Ω	morn	
20	T.	♂ ♀ ♄ 7h 8m even.	20 6 4	41 7	19 5 18		34	
21	Fri.		20 19 4	41 7	19 6 3	π	1	24
22	Sat.	Warm and Pleasant.	20 30 4	40 7	20 6 47		2	10
23	C		20 42 4	39 7	21 7 30		2	55
24	Mo.	☿ in Ω	20 53 4	38 7	22 8 14	☾	3	35
25	Tu.	Look out for a cold	21 4 4	37 7	23 8 58		4	2
26	We.	and continued rain.	21 14 4	36 7	24 9 40	μ	4	10
27	Th.		21 24 4	35 7	25 10 27		5	10
28	Fri.	Windy and cool.	21 34 4	34 7	26 11 13	†	5	35
29	Sat.		21 43 4	33 7	27 morn		rises	
30	C	Vegu south, 2h 1m morn.	21 52 4	33 7	27 56		8	20
31	Mo.		22 0 4	32 7	28 1 50	WS	9	18

It does not look well to have a so slip around into the garden. gate without hinges, held up in the It does not look well to have the gateway by a prop in a "slantindi- woman hang out the clothes on cular" position, having at the bottom rough and thorny bushes, and tear an aperture through which some hog them in getting them off, when a with a convenient nose can rub, and neat line would save that trouble.

1847

SIXTH MONTH. JUNE.

30 DAYS.

## MOON'S PHASES.

Last Quarter, 5d 10h 57m even.  
 New Moon, 12d 7h 43m even.  
 First Quarter, 20d 2h 23m even.  
 Full Moon, 28d 8h 12m morn.

## SUN ON MERIDIAN.

5d 0h 1m 57s even.  
 12d 0h 0m 36s  
 20d 11h 58m 55s morn  
 28d 11h 57m 26s

M	W	Celestial Phenomena, Aspects, &c.	Decl.	ris	sets.	s'th	p.	R	S.
1	Tu.	Frequent Showers.	22 8 4	31 7	29 2	45 10	14		
2	We.		22 16 4	31 7	29 3	40 11	4		
3	Th.	Antares south, 11h 33m	22 23 4	30 7	30 4	31 11	51		
4	Fri.	[even.	22 30 4	30 7	30 5	26 11	morn		
5	Sat.		22 37 4	29 7	31 6	18 41			
6	C	♂ ♂ ☉	22 43 4	29 7	31 7	10 1	36		
7	Mo.	Warm and fine with	22 49 4	28 7	32 8	2 2	20		
8	Tu.	occasional showers.	22 54 4	28 7	32 8	57 3	0		
9	We.		22 59 4	27 7	33 9	46 3	43		
10	Th.	♀ sets, 8h 29m even.	23 4 4	27 7	33 10	45 4	23		
11	Fri.		23 8 4	26 7	34 11	40 4	58		
12	Sat.	♂ ♂ ☉ and 40 34 north.	23 12 4	26 7	34 even.		sets		
13	C		23 15 4	26 7	34 36	5	59		
14	Mo.	A fall of rain may be	23 18 4	26 7	34 1	30 9	29		
15	Tu.	expected.	23 20 4	26 7	34 2	21 10	18		
16	We.		23 23 4	25 7	35 3	10 11	22		
17	Th.		23 24 4	25 7	35 3	58 11	46		
18	Fri.	Cool, clear and pleasant.	23 25 4	25 7	35 4	41 morn			
19	Sat.		23 26 4	25 7	35 5	24 26			
20	C	☉ enters ♉ 9h 10m ev.	23 27 4	24 7	36 6	6 1	6		
21	Mo.	☉ ☉	23 27 4	24 7	36 6	50 1	44		
22	Tu.		23 26 4	24 7	36 7	32 2	13		
23	We.	Cool wind with indi-	23 26 4	25 7	35 8	17 2	51		
24	Th.	cations of rain.	23 25 4	25 7	35 9	4 3	28		
25	Fri.		23 23 4	25 7	35 9	55 4	5		
26	Sat.		23 21 4	26 7	34 10	46 4	40		
27	C	♂ south, 2h 20m even.	23 18 4	26 7	34 11	40 5	12		
28	Mo.		23 16 4	27 7	33 morn.		ris		
29	Tu.	Hot sultry weather may	23 12 4	27 7	33 1	32 8	27		
30	We.	now as expected.	23 9 4	28 7	32 2	28 9	17		

It does not look well for anybody's daughters to walk the streets in kid slippers in Dec., and lace themselves so cruelly, that their voices waste away and their cheeks turn to the colour of moonlight.

It does not look well for farmers' daughters to be always talking about piano playing and the trilling of Sig-nor Cantanini, while they do not know of what butter is made, and pretend to suppose a cow a rhinoceros.

1847

SEVENTH MONTH. JULY.

31 DAYS.

## MOON'S PHASES.

Last Quarter, 5d 3h 33m morn.  
 New Moon, 12d 6h 28m morn.  
 First Quarter, 21d 7h 43m morn.  
 Full Moon 27d 4h 59m even

## SUN ON MERIDIAN.

5d 11h 55m 54s  
 12d 11h 54m 51s  
 21d 11h 54m 4s  
 27d 11h 55m 7s

M	W	Celestial Phenomena., Aspects, &c.	Decl.	rises	sets	s'th.	p.	R.	S.
1	Th.		23 54	29 7 31	3 22	☾	10 2		
2	Fri.	Quite pleasant.	23 04	30 7 30	4 15		10 40		
3	Sat.		22 55	30 7 30	5 7	☿	11 16		
4	C	☉ apoge, 5h 30m morn.	22 50	31 7 29	5 59		11 47		
5	Mo.		22 44	31 7 29	6 51		morn		
6	Tu.		22 38	32 7 28	7 44	♄	22		
7	We.	♀ sets, 9h 48m even.	22 32	32 7 28	8 38		1		
8	Th.		22 25	33 7 27	9 32	♂	1 36		
9	Fri.	Indications of rain.	22 18	33 7 27	10 27		2 14		
10	Sat.		22 10	34 7 26	11 20	♂	2 58		
11	C		22 2	34 7 26	even.		3 49		
12	Mo.	♂ ♀ ♄ and 20° 22' south.	21 54	35 7 25	9	♂	sets		
13	Tu.		21 46	36 7 24	1 3		8 15		
14	We.	Heavy showers accom-	21 36	37 7 23	1 50		8 50		
15	Th.	panied with thunder.	21 26	38 7 22	2 36	♂	9 34		
16	Fri.		21 17	39 7 21	3 20		10		
17	Sat.	Altair so., 11h 55m ev.	21 6	40 7 20	4 2	♂	10 35		
18	C		20 56	41 7 19	4 45		11 1		
19	Mo.	Look for a storm.	20 45	42 7 18	5 27		11 38		
20	Tu.		20 34	43 7 17	6 10	♂	morn		
21	We.	♂ south, 3h 0m morn.	20 22	44 7 16	6 58		15		
22	Th.		20 10	44 7 16	7 45	♄	53		
23	Fri.		19 58	45 7 15	8 34		1 33		
24	Sat.	♄ stationary.	19 45	46 7 14	9 27	♂	2 11		
25	C		19 32	46 7 14	10 22		2 56		
26	Mo.	Continued fine weather	19 19	47 7 13	11 19		3 48		
27	Tu.	for several days.	19 5	48 7 12	morn.	♂	rises		
28	We.		18 51	49 7 11	1 12		7 58		
29	Th.	♀ ♀ ☉ 40° 44' south.	18 37	50 7 10	2 7	♄	8 42		
30	Fr.		18 22	51 7 9	3 1		9 22		
31	Sat.	Blustering winds.	18 8	52 7 8	3 55	☿	9 57		

Knowledge is not a couch whereupon a proud mind to raise itself upon; or a  
 to rest a searching and restless spirit; fort or commanding ground for strife  
 or a terrace for a wandering and varia- and contention; or a shop for profit or  
 ble mind to walk up and down with a sale; but a rich store-house for the glory  
 fair prospect; or a tower of state for a of the Creator and relief of man's estate.

1847

EIGHTH MONTH. AUGUST.

31 DAYS.

## MOON'S PHASES.

Last Quarter, 3d 6h 50m morn.  
 New Moon, 10d 7h 19m even.  
 First Quarter, 19d 0h 52m morn.  
 Full Moon 26d 1h 0m morn.

## SUN ON MERIDIAN.

3d 11h 54m 15s  
 10d 11h 55m 4s  
 19d 11h 56m 46s  
 26d 11h 58m 33s

M	W	Celestial Phenomena., Aspects, &c.	☉ Decl.	☉ rises	☉ sets	☉ s'th.	☉ p.	☉ R.	☉ S.
1	C		17 52	4 53	7 7	4 48	γ	10	35
2	Mo.	Mild with indications	17 37	4 54	7 6	5 41	8	11	20
3	Tu.	of rain.	17 21	4 55	7 5	6 34		11	58
4	We.		17 5	4 56	7 4	7 28	Π	morn	
5	Th.	☿ south, 1h 58m morn.	16 49	4 57	7 3	8 22			48
6	Fri.		16 32	4 58	7 2	9 15	☿	1	40
7	Sat.	Warm and sultry with	16 16	5 7		10 7		2	34
8	C	occasional showers.	15 59	5 16	59	10 56		3	29
9	Mo.		15 41	6 26	58	11 45	Ω	4	27
10	Tu.		15 24	5 36	57	even.		sets	
11	We.	♂ south, 4h 49m morn.	15 6	5 46	56	31	μ	7	40
12	Th.		14 48	5 56	55	1 16		8	13
13	Fri.	♀ ♂ ☉	14 29	5 66	54	1 59		8	43
14	Sat.		14 11	5 76	53	2 40	☿	9	13
15	C	Very warm.	13 52	5 86	52	3 23		9	38
16	Mo.		13 33	5 106	50	4 6	η	10	8
17	Tu.	Farmalhaut south, 1h 1m	13 14	5 116	49	4 50		10	43
18	We.	[morn.	12 54	5 136	47	5 36		11	13
19	Th.	Cooler for a few days.	12 35	5 146	46	6 24	♂	morn	
20	Fri.		12 15	5 166	44	7 15			3
21	Sat.	♂ south, 4h 26m morn.	11 55	5 176	43	8 7	☿	1	5
22	C		11 36	5 186	42	9 3		2	10
23	Mo.	Appearances indicate	11 14	5 196	41	9 59	☿	3	16
24	Tu.	rain.	10 54	5 206	40	10 56		4	25
25	We.	☿ ♂ ☉ and 40 42 south.	10 33	5 226	38	11 52	☿	5	34
26	Th.		10 12	5 236	37	morn.		rises	
27	Fri.		9 51	5 256	35	1 44	γ	7	7
28	Sat.	♀ at greatest brillancy.	9 30	5 266	34	2 39		7	32
29	C		9 9	5 276	33	3 34	8	8	5
30	Mo.	A long storm may now	8 47	5 296	31	4 29		8	45
31	Tu.	be looked for.	8 25	5 306	30	5 24	Π	9	26

## KNOWLEDGE OF BOOKS.

Knowledge of books in recluse possession of a man of business, it is men is like that sort of lantern which a torch in the hand of one willing and hides him who carries it, and serves able to show those who are bewildered only to pass through secret and the way which leads to prosperity.

1847

NINTH MONTH. SEPTEMBER.

30 Days.

## MOON'S PHASES.

Last Quarter, 1d 4h 5m even.  
 New Moon, 9d 10h 38m morn.  
 First Quarter, 17d 2h 11m even.  
 Full Moon, 24d 9h 16m morn.

## SUN ON MERIDIAN.

1d 11h 59m 41s  
 9d 0h 2m 56s even.  
 17d 0h 5m 44s  
 24d 0h 8m 9s

M	W	Celestial Phenomena, Aspects, &c.	Decl.	rises	se's.	s th	p.	R.	S.
1	We.	Rain and wind.	8 45	32 6	28 6	18 10	☾	10	10
2	Th.		7 42	5 34	6 26	7 12	☾	11	9
3	Fri.	☿ ☽ ☿	7 20	5 35	6 25	8 4		morn	
4	Sat.	Cool, Cloudy weather.	6 57	5 36	6 24	8 54		12	
5	C		6 35	5 38	6 22	9 43	☾	1	16
6	Mo.	☿ south, 8h 2m morn.	6 13	5 39	6 21	10 29		2	21
7	Tu.		5 50	5 40	6 20	11 13	☾	3	26
8	We.	Pleasant, but cool.	5 28	5 42	6 18	11 57		4	34
9	Th.		5 5	5 43	6 17	even.		sets	
10	Fri.	☿ ☽	4 42	5 45	6 15	3	☾	6	53
11	Sat.	☿ stationary.	4 19	5 46	6 14	1 21		7	20
12	C		3 56	5 48	6 12	2 4	☾	7	51
13	Mo.		3 33	5 49	6 11	2 49		8	23
14	Tu.	Altain, south, 8h 13m	3 10	5 51	6 9	3 33		8	56
15	We.	[even.	2 47	5 52	6 8	4 30	☿	9	34
16	Th.	Fine weather may now	2 24	5 53	6 7	5 7		10	14
17	Fri.	be expected of several	2 1	5 55	6 5	5 28	☾	10	59
18	Sat.	days continuance.	1 37	5 56	6 4	6 51		11	49
19	C		1 14	5 57	6 2	7 45	☾	morn	
20	Mo.	☿ south, 10h 41m even.	51	5 58	6 2	8 39		54	
21	Tu.		27	5 59	6 1	9 15		1	59
22	We.	☿ enters ☾ 11h 24m	N 46		6	10 30	☿	3	3
23	Th.	[morn.	S 19	6	15	59		4	12
24	Fri.	☿ stationary.	42	6	25	58	morn.	☿	rises
25	Sat.		1 56	35	57	1 19		6	23
26	C	Look for a long storm	1 29	6	45	56	☿	6	48
27	Mo.	about this time.	1 52	6	55	55		7	21
28	Tu.		2 16	6	65	54	☾	7	56
29	We.		2 39	6	85	52		8	30
30	Th.	☿ south, 55 9m even.	3 26	95	51	6	☾	9	15

Potatoes, when slightly frosted, sweating. When they are in this state, in order to recover them, and often like an animal body infested by some disorder which it throws off by perspiration, are found quite wet, turning over, and a quantity of mill seeds thrown among them as they

1847

TENTH MONTH. OCTOBER.

31 DAYS.

## MOON'S PHASES.

Last Quarter, 1d 2h 27m morn  
 New Moon, 9d 3h 57m morn  
 First Quarter 17d 2h 31m morn  
 Full Moon, 23d 6h 26m even  
 Last Quarter, 30d 4h 47m even

## SUN ON MERIDIAN.

1d 0h 10m 27s  
 9d 0h 15m 46s  
 17d 0h 14m 37s  
 23d 0h 15m 35s  
 30d 0h 16m 10s

M	W	Celestial Phenomena, Aspects, &c.	Decl.	rises	sets.	s'th.	p.	R.	S.
1	Fri.		3 26 6	11 5 49	6 51	☾	10	6	
2	Sat.	Fine pleasant weather,	3 49 6	13 5 47	7 40	☾	11	3	
3	C	with a little frost.	4 12 6	14 5 46	8 27				morn
4	Mo.		4 35 6	15 5 45	9 12				7
5	Tu.	☿ south, 9h 38m even.	4 58 6	17 5 43	9 57	☿	1	12	
6	We.		5 21 6	18 5 42	10 38				2 22
7	Th.	Indications of rain.	5 44 6	20 5 40	11 18	☽	3	26	
8	Fri.		6 7 6	21 5 39	11 59		4	30	
9	Sat.	☉ eclipsed, invisible.	6 30 6	22 5 38	even.				sets
10	C		6 53 6	24 5 36	46	☿	6	13	
11	Mo.		7 16 6	25 5 35	1 30		6	48	
12	Tu.	Markab south, 9h 42m	7 38 6	26 5 34	2 16	♀	7	28	
13	We.	even.	8 1 6	28 5 32	3 4		8	13	
14	Th.	A storm may be expected	8 23 6	29 5 31	3 53	☿	9	3	
15	Fri.		8 45 6	31 5 21	4 44		9	59	
16	Sat.	☿ south, 8h 37m even.	9 7 6	33 5 27	5 36	☿	11		
17	C		9 29 6	34 5 26	6 28				morn
18	Mo.	☿ in ☉	9 51 6	36 5 24	7 22	☿			3
19	Tu.	Quite mild.	10 13 6	37 5 23	8 15		1	6	
20	We.		10 34 6	38 5 22	9 9	☿	2	10	
21	Th.	☉ ☉	10 56 6	40 5 20	10 4		3	16	
22	Fri.		11 17 6	42 5 18	11	☿	4	24	
23	Sat.	Utterly impossible to	11 38 6	43 5 17	11 57				rises
24	C		11 59 6	45 5 15	morn		5	50	
25	Mo.	prognosticate, with any	12 20 6	46 5 14	1 54	☿	6	27	
26	Tu.		12 40 6	48 5 12	2 52		7	10	
27	We.	degree of accuracy, what	13 6 6	49 5 10	3 49	☿	8	1	
28	Th.		13 20 6	50 5 11	4 43		9		
29	Fri.	weather may be for the	13 40 6	52 5 8	5 35	☉	10	3	
30	Sat.		14 6 6	53 5 7	6 23		11	8	
31	C	remainder of the month.	14 10 6	54 5 6	7 9				morn

Economy is one of the chief duties of mission of crime and the endurance of a state, as well as of an individual. In misery. The man that lives within his is not only a great virtue in itself, but income can be just, humane, charitable, it is the parent of many others. It pre- and independant. He who lives beyond serves men and nations from the com- it becomes, almost necessarily, rapaci.

1847

ELEVENTH MONTH. NOVEMBER.

30 DAYS.

## MOON'S PHASES.

New Moon, 7d 10h 1m even.  
 First Quarter, 15d 1h 5m even.  
 Full Moon, 22d 5h 59m morn.  
 Last Quarter, 29d 11h 12m morn.

## SUN ON MERIDIAN.

7d 0h 16m 4s  
 15d 0h 15m 5s  
 22d 0h 13m 28s  
 29d 0h 11m 36s

M	W	Celestial Phenomena, Aspects, &c.	Decl.	rises	se's.	s th	p. R	S.
1	We.		14 39 6	55 5	5	7 53	☾	14
2	Th.	A long, cold rain may	14 58 6	57 5	3	8 36		1 23
3	Fri.		15 16 6	58 5	2	9 18	☾	2 27
4	Sat.	be expected about this	15 35 6	58 5	1	10 1		3 30
5	C		15 53 7	5		10 44		4 31
6	Mo.	time.	16 11 7	14 59	11	30	☾	5 53
7	Tu.	☾ stationary.	16 29 7	24 58	even.			sets
8	We.	♀ greatest brilliancy.	16 46 7	34 57		14	♂	5 43
9	Th.		17 3 7	44 56	1	1		6 28
10	Fri.	☾ stationary.	17 20 7	64 54	1	50		7 10
11	Sat.	More moderate.	17 37 7	74 53	2	41	☾	8 6
12	C		17 53 7	84 52	3	32		9 8
13	Mo.	☾ south, 3h 58m morn.	18 9 7	104 50	4	24	☾	10 11
14	Tu.		18 24 7	114 49	5	16		11 15
15	We.	A slight fall of snow	18 40 7	124 48	6	8	☾	morn
16	Th.		18 55 7	134 47	7			20
17	Fri.	may be expected about	19 9 7	144 46	7	52	☾	1 26
18	Sat.		19 24 7	154 45	8	45		2 23
19	C	the midde of this month	19 38 7	164 44	9	40	☾	3 35
20	Mo.		19 51 7	174 43	10	46		4 36
21	Tu.		20 4 7	184 42	11	34	☾	5 34
22	We.	☾ south, 5h 34m even.	20 17 7	194 41	morn.			rises
23	Th.		20 30 7	204 40	1	32		5 31
24	Fri.	High wind.	20 42 7	214 39	2	29	☾	6 21
25	Sat.	☾ ☽ ☉	20 53 7	224 38	3	24		7 17
26	C		21 5 7	234 37	4	15	☾	8 17
27	Mo.	Look (probably in vain)	21 15 7	244 36	5	4		9 19
28	Tu.		21 26 7	254 35	5	50	☾	10 24
29	We.	for an earthquake.	21 36 7	264 34	6	35		11 30
30	Th.	♂ south, 9h 17m even.	21 46 7	274 33	7	17		morn

ous, mean, faithless, contemptible. The character as well as national happiness  
 economist is easy and comfortable; the has, from the beginning of the world to  
 prodigal harassed with debts, and un- the present day, been sacrificed on the  
 able to obtain the necessary means of altar of profusion.  
 life. So it is with nations. National

Spectator's Key.

1847

TWELFTH MONTH. DECEMBER.

31 DAYS.

## MOON'S PHASES;

## SUN ON EERIDIAN.

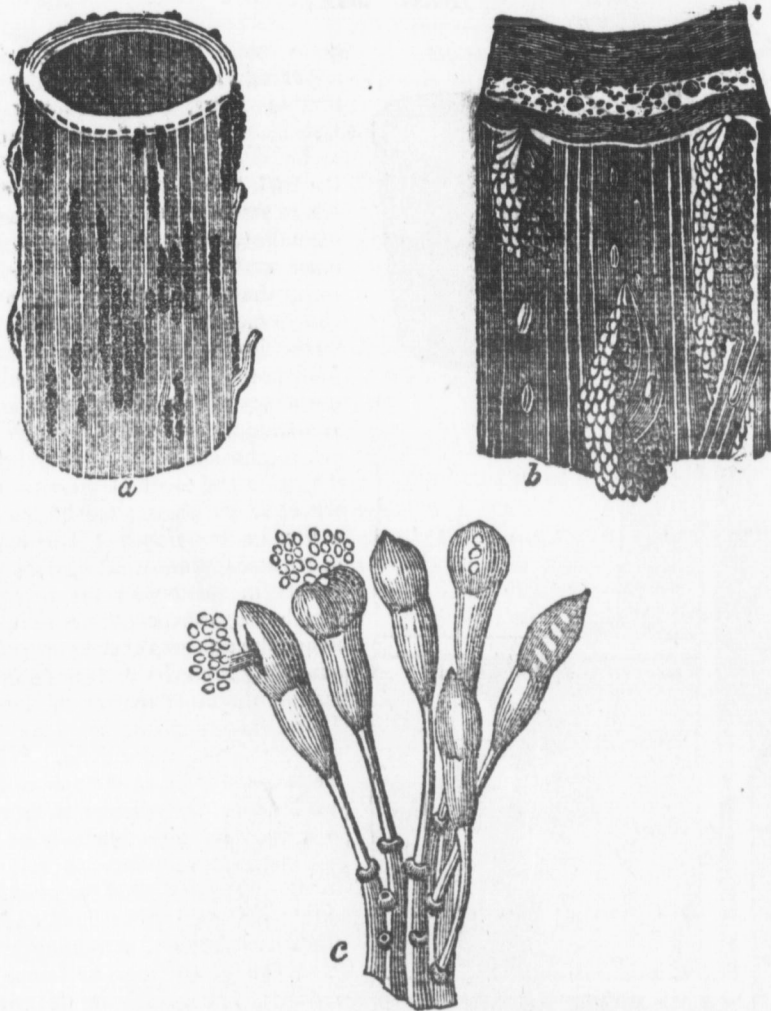
New Moon,	7d 3h 21m even.	7d	0h	7m	59s
First Quarter,	14d 10h 17m even.	14d	0h	4m	46s
Full Moon,	21d 4h 58m even.	21d	0h	1m	18s
Last Quarter,	29d 8h 34m even.	29d	1h	57m	19s

M	W	Celestial Phenomena, Aspects, &c.	Decl.	ris	sets.	s'h	p.	R.	S.
3	We.		21	55	7 28	4 32	7 58	≈	40
1	Th.	Snow may be expected.	22	47	28	4 32	8 40		1 43
2	Pri.	♂ statonary.	22	12	7 29	4 31	9 21	∩	3 45
4	Sat.		22	20	7 29	4 31	10 9		3 46
5	C	Alderbaren south, 11h	22	28	7 30	4 30	10 56		4 46
6	Mo.	[43m even.	22	35	7 30	4 30	11 45	↑	5 44
7	Tu.		22	42	7 31	4 29	even.		sets
8	We.	♂ south, 8h 42m even.	22	48	7 31	4 29	26	∩	5 29
9	Th.	High Wind.	22	54	7 32	4 28	1 28		6 35
10	Fri.		22	59	7 32	4 28	2 21	≈	7 37
11	Sat.	Dog Star south, 1h 27m	23	47	33	4 27	3 13		8 40
12	C	[morn.	23	87	33	4 27	4 5		9 45
13	Mo.	Snow	23	12	7 34	4 26	4 57	⋈	10 50
14	Tu.		23	16	7 34	4 26	5 48		11 55
15	We.	♂ greatest elongation,	23	19	7 34	4 26	6 39	∩	morn
16	Th.		23	21	7 35	4 25	7 31		1 1
17	Fri.	♂ ♀ ☉ Cloudy.	23	23	7 35	4 25	8 24	∩	2 10
18	Sat.		23	25	7 35	4 25	9 20		3 18
19	C	♂ south, 1h 29m morn.	23	26	7 35	4 25	10 17	∩	4 25
20	Mo.		23	27	7 36	4 24	11 15		5 33
21	Tu.		23	27	7 36	4 24	morn	∩	ris
22	We.	☉ enters ∩ 6h 56 morn.	23	27	7 36	5 24	1 8		5 25
23	Th.		23	26	7 36	4 24	2 3	∩	6 28
24	Fri.	♂ stationary,	23	25	7 35	4 25	2 55		7 32
25	Sat.	Christmas.	23	23	7 35	4 25	3 42	∩	8 37
26	C	For further astronomi-	23	21	7 35	4 25	4 27		9 42
27	Mo.	cal calculations, prog-	23	18	7 35	4 25	5 11		10 48
28	Tu.	nostications of weather,	23	15	7 34	4 26	5 54	≈	11 54
29	We.		23	12	7 34	4 26	6 36		morn
30	Th.	miscellany, &c, see Mil-	23	77	34	4 26	7 19	∩	1 1
31	Fri.	ler's Almanac for '48.	23	37	34	4 26	8 3		2 10

"GO THE WHOLE HOG."

The expression, I am told, is of Virginia origin. In that state, when the butcher kills a pig, it is usual to demand of each customer whether he will "Go the whole hog?" as, by such extensive traffic, a purchaser may supply his table at a lower price than is demanded of him whose imagination revels among prime piedees, to the exclusion of baser matter.—*Hamilton's Men & Manners.*

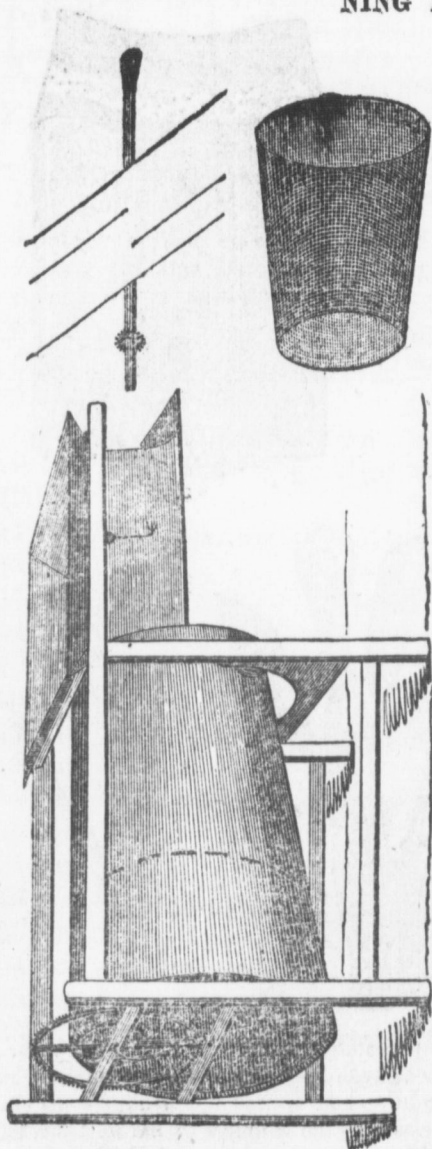
## RUST IN WHEAT.



The above is a representation of rust in wheat, as we find it delineated in Johnson's Encyclopedia. *a*, is a portion of straw, magnified, to show the parasitic plant or fungus, which is called rust, or mildew. *b*, is a small section of the straw, much more strongly magnified. *c*, is a very highly magnified representation, showing a small part of the bottom of the pore in the straw, with some of the parasitic fungi growing upon it. Two of these are represented as seen bursting and scattering their seeds.

vegetation will give an air of improbability to the description, with those who have had limited opportunities of observing the wonders of nature's works. In reality, however, it is no more surprising that vegetables should exist and mature and scatter their seeds, which are too small to exhibit any organized form to the naked eye, than it is that hundreds of animals, of new and strange forms, perfect in all their parts, but imperceptible to the naked eye, should be discovered in a single drop of marsh-water.—*Mich. Far.*

# DESCRIPTION OF A. COOLEY'S REVOLVING IRON FANNING MILL.



The whole is to be constructed of iron, except the frame, which is composed of timber two inches square. The cylinder, which contains the fan, screen and sieve is made of sheet iron, in length 3 feet, and in diameter 24 inches at the upper end and 30 inches at the lower end. When the cylinder is suspended in the frame, the bottom will be on an angle of about 15 degrees while the top is level. The upper end of it is supported by two friction rollers, while the lower end rests upon a rim of flange, 8 inches in diameter, which is attached to the back side of the spur wheel.—There are two sets of arms or spokes extending from the centre to the inner surface of the cylinder—one set at the lower end, and the other about midway of the cylinder. A turned iron shaft 20 inches long and  $\frac{3}{4}$  of an inch in diameter, to which the wings of the fan are attached is suspended or running through the centre of these 2 sets of arms, while the lower end to which the small cog wheel or pinion is attached, rest in a box in the frame. The fan is constructed some what like the propellers in steamboats the wings of which are attached to the shaft between the two sets of arms or spokes extending from the shaft to within 1 inch of the inner surface of the cylinder, barely giving room for the wheat to pass under them. While the fan is driven at the rate of 500 revolutions, the cylinder is moving in a contrary direction only at the rate of 20 revolutions per minute. In the upper portion of the cylinder, extending down to the middle set of arms, is a screen, surrounding the inside and supported by hoops at each end, one inch in thickness, which keep the screen one inch from the inner surface of the cylinder, giving room for the chaff, cockle, and other foul stuff to pass through the screen upon the inner surface of the cylinder, and by its revolutions is carried down to the hoop at the lower end of the screen, and discharged through holes cut in the cylinder. Within and extending the same length of the screen is a cylinder sieve approaching somewhat to the form of a cone the small end downward; the sieve is constructed in this

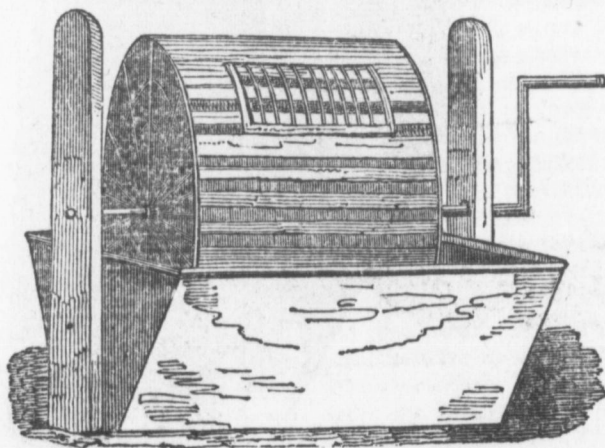
form for the purpose that the bottom portion where the grain and chaff may fall, shall incline a little backward, so as to allow the wheat heads and other heavy substances to pass off with the chaff. Both the sieve and screen are attached to the cylinder, and revolve with it. As the grain passes through the sieve into the screen the revolving motion carries it to the end of the cylinder, where it discharges itself. The hopper sets upon the back end of the frame, over the shoe, and is stationary. The shoe is suspended by two wire hoops under the hopper and a slight motion is given to it by means of an eccentric, attached to the end of the shaft of the fan. The fan is propelled by a cog-wheel 18 ins. in diameter, which meshes into a 3 inch pinion. The cylinder, as before described, is carried in a contrary direction as a flange or rim on the back side of the cog-wheel. The sieve is kept to its place by means of springs so that, one quality can be readily taken out and another for a different kind of grain be put in its place. Only one sieve is required for wheat, rye or barley and that is the

finest quality used in the common faning mills for wheat. The revolving motion keeps the wheat and chaff in such motion that the sieve will not choke, as in the common mill.

#### *Advantages over the Common Mill.*

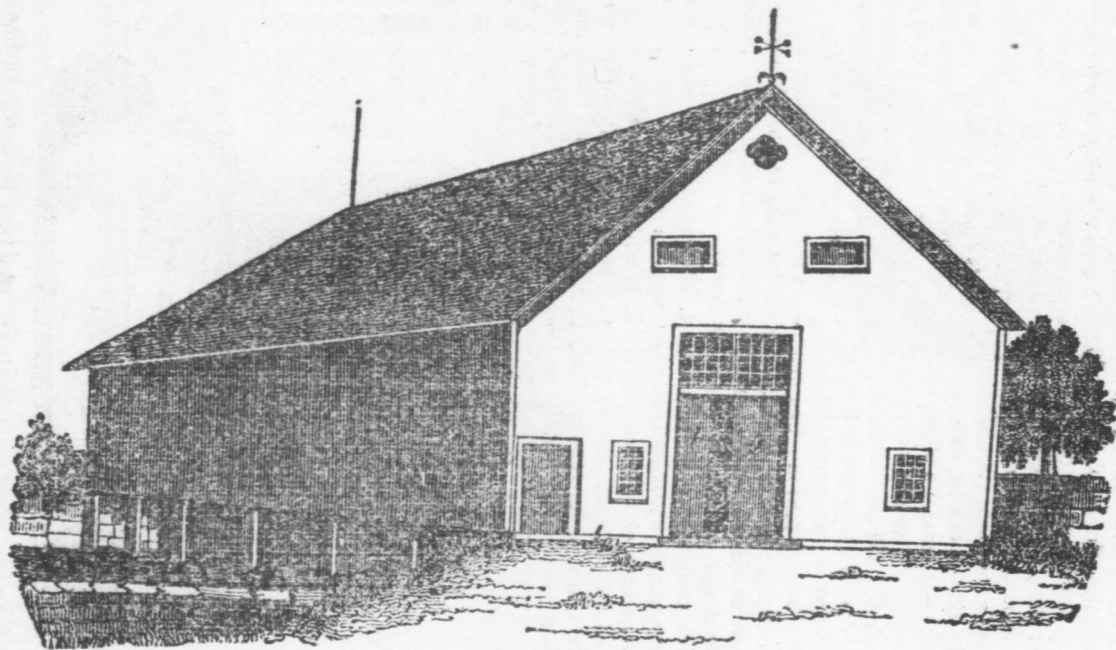
1. It is built entirely of iron, except the frame, and covered inside and out with Japan Varnish, rendering it impervious to water; consequently it will not swell, shrink, rot, or rust.
2. There is no shaking process, as in the old fashioned mill, but on the contrary it moves with a steady revolving motion: therefore it will not be shaken to pieces, nor is there any danger of its getting out of order with common usage but will endure for a century.
3. It will clean wheat fit for market by one running through (if it is not very foul,) and clean at the rate of 40 bushels per hour.
4. It turns one half easier than the old wooden mills.
5. It will cost no more.
6. The weight of it is not more than half of that of the old fashioned mill—consequently more portable.

#### A POTATO WASHER.



We copy the above sketch of a potato washer from the English Agricultural Gazette, which describes it as simply a churn-like cylinder, with open bars placed at such a distance as to prevent any of the potatoes from falling through, except very small ones. As it revolves, the lower part passes through a trough of water, and thus washes them. The cylinder may be easily unshipped from the frame any time desired. We have seen something similar to this in our country, and it was found very convenient, especially where large quantities of potatoes are used. Potatoes, and indeed, all roots, before being fed to stock, ought to be well washed. — *Am. Ag.*

A MASSACHUSETTS BARN.



ELEVATION.

*Description of Elevation.*—*b b*, Large doors, which open on the barn floor. *b*, Stable door. The windows slide back and forth, for the purpose of ventilation when necessary.



*Description of Ground Floor.*—*a*, Barn floor, 12 feet by 60.

*b b*, Doors hung on iron rods and rollers over head, like the folding doors of the parlors of our modern houses in the cities, opening and closing with equal ease; made of  $1\frac{1}{2}$  inch clean stuff and battened on the outside with open batens, formed so as to give the doors the appearance of pannel work. The posts on each side of the doors are 14 inches wide, with a piece sawed out of the centre, through which the doors pass. The posts are framed into the

sills with a double cock-tenon, to give strength.

*c c*, Stone door sills, 16 feet long by 18 inches wide, with a lip raised on the inside, against which the doors rest, and then slanting with a bevel outward.

*d*, Stable, 12 feet by 24, with fixtures for one pair of working horses, and two yoke of oxen.

*e*, Bay, 8 feet high, until it rises above the stable, then it runs the whole length of the barn, 60 feet.

*f*, Store room, 16 feet square, with a flight of stairs leading into the cellar, 8 feet high.

*g*, Bay, 16 feet by 44, until it rises above the ceiling of the store room, then it goes the whole length of the barn, 60 feet.

*h h*, Upright posts framed into timbers above and below, with rungs inserted for ladders, to ascend and descend at pleasure.

*i i i*, Narrow scuttle doors, through which the loam is passed down into the stable below, to cover the hardpan, over which the boards and plank are laid, as described in *b*, of the basement.

*Description of Basement.*—*a*, Open shed, facing east, 12 feet by 60.

*b*, Stable, with windows the whole length, hung with strong strap hinges to open and shut at pleasure, also a window at the south end. The object of so much window is, to throw out the manure, and to ventilate the stable, which is 12 ft. by 60. The ground under the stable is a hardpan, over which is placed every summer a layer of loam 6 or 8 ins. thick, and carefully leveled. On this boards are laid lengthwise, some inches apart, and on these boards plank are laid cross-wise. Through the interstices of these the liquid manure runs down and mixes with the loam, which is thrown out in the spring, and mixed with the manure under the shed, and fresh loam put in place of it, and the boards and plank replaced. This takes but a short time to do.

*c*, Manger, 3 feet wide, made with plank formed into timbers and pinned; not a nail about it, and perfectly tight. Stalls are divided off for two cows or

oxen each, to be tied with ropes fastened at each outer corner.

*d*, Open space, 5 feet by 60 feet.

*e*, Cellar, 8 feet by 16, filled with roots in the fall and supplied from the pits during the winter as they are wanted.

*f*, Bay, 8 feet by 34, running up to the roof, 27 feet to the eaves.

*g g g*, A bank of loam the whole length of stable, except against the doors, which are guarded by a narrow plank fixture to keep the loam in its place which is mixed in small quantities with the manure every morning as the stables are cleared.

*h h*, Stable doors.

*i i i*, Seven stone pillars 10 feet long, standing on flat stones 2 feet under ground, bolted to the sill of the upper story with iron bolts, made of  $1\frac{1}{2}$  inch round rods.

The barn stands upon a strong foundation of stone on the west side; both ends are laid in lime mortar, and well pointed with the same material. The top stones of this foundation are from 10 to 14 feet long, by about a foot square. At the south end, the walls jut out on each side of the barn doors, and the space is filled up with earth between, to make a gradual descent, and the egress easy for an empty cart or wagon to pass out into the adjoining meadow. The outside covering is of clear pine boards, well seasoned planed, tongued, and grooved together, running up and

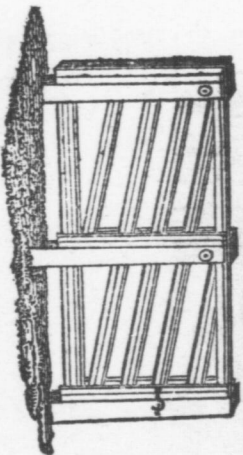
down, painted, and the roof well shingled, and every part of the work done in the most substantial manner.

*Cost*.—The stone and timber being on M. K.'s own land, the whole cost of this barn did not exceed \$600, the work of the owner reckoned at the usual rates he paid to other mechanics. The presumption, however, in my own mind is, that if he did not do the work of 3 men himself, he did and saved what was equivalent to it by personally superintending every stroke; by being up at the early dawn of day with teams all fed, yoked, and harnessed, and every man placed at his proper post. We make these observations that no one may be disappointed who shall undertake to build a similar barn, hire his builders, stone-cutters, masons, and carpenters, find them plenty of alcohol, while he sits at the neighbouring tavern taking into his own stomach copious draughts of the good creature, talking politics, &c., &c., and finds on footing up all his bills that they amount to \$1,200. Here is a building which, if kept properly covered and painted, will last a century or upwards.

The yard adjoining on the east, has a fountain of running water brought into it by pipes. A high wall supports the bank on the north side next to the road, which breaks off all northern winds, and it is intended to be surrounded with sheds on all sides.

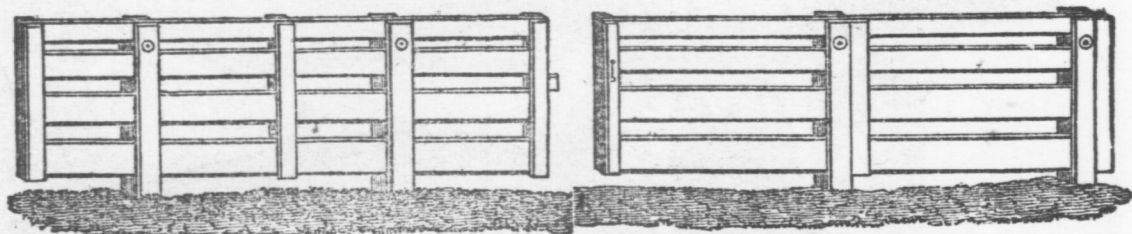
A late number of Hunt's Merchant's Magazine, a American periodical, contains an interesting memoir of the late Gideon Lee, from which we derive the following anecdote, illustrate of his own fair dealings, and of the usual effects of trickery in trade. No man more thoroughly disposed dishonestly than Mr. Lee; and he used to remark, "no trade can be sound that is not beneficial to both parties; to the buyer as well as the seller. A man may obtain a temporary advantage by selling an article for more than it is worth, but the very effect of such operations must recoil on him, in the shape of bad debts and increased risks." A person with whom he had some transactions, once boasted

to him that he had, upon one occasion, obtained an advantage over such a neighbour: "And to-day," said he, "I have obtained one over you," "Well," said Mr. Lee, "that may be; but if you will promise never to enter my office again, I will give you that bundle of goat skins." The man promised, and took them. 15 years afterwards, he entered Mr. Lee's office. At the instant, on seeing him, he exclaimed, "You have violated your word; pay me for the goat skins!" "I am quite poor, and have been very unfortunate since," said the man. "And you will always be poor; that miserable desire for over reaching others must ever keep you so," said Mr. Lee.

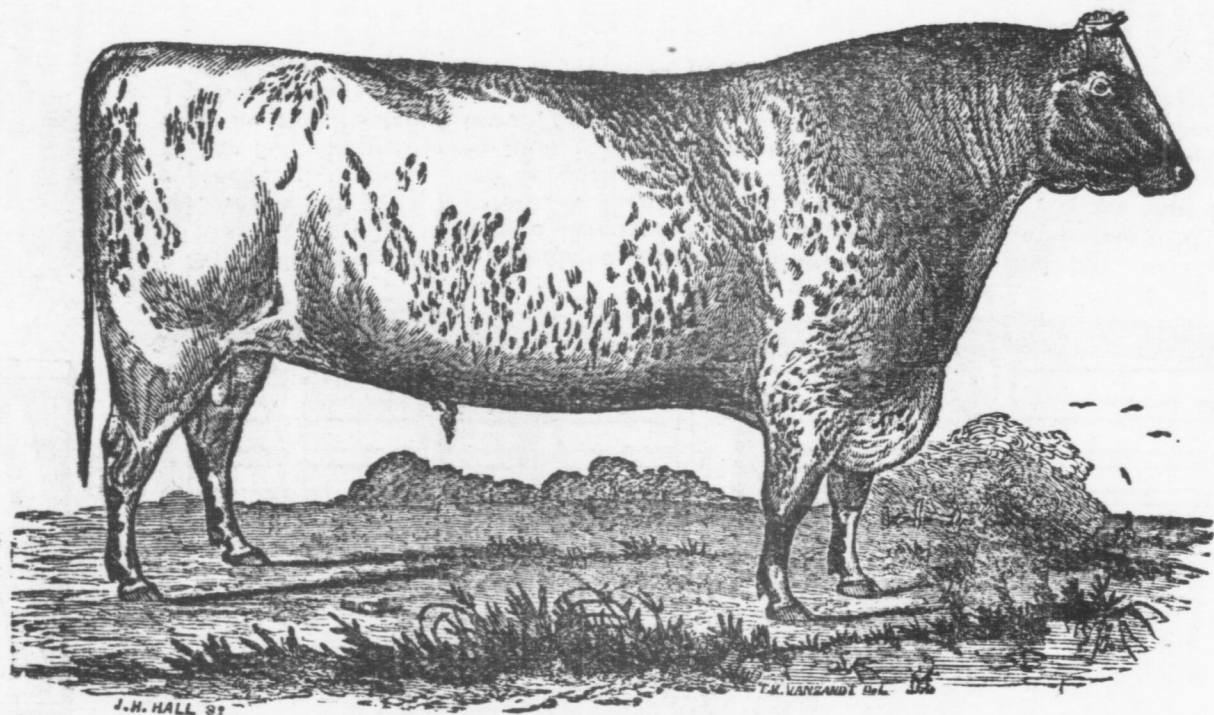


*Self-Shutting Gate*.—This is an admirable gate where small ones are wanted. It also runs on rollers. The slats being placed obliquely, the moment the hand lets go of the gate instantly slides back and shuts.

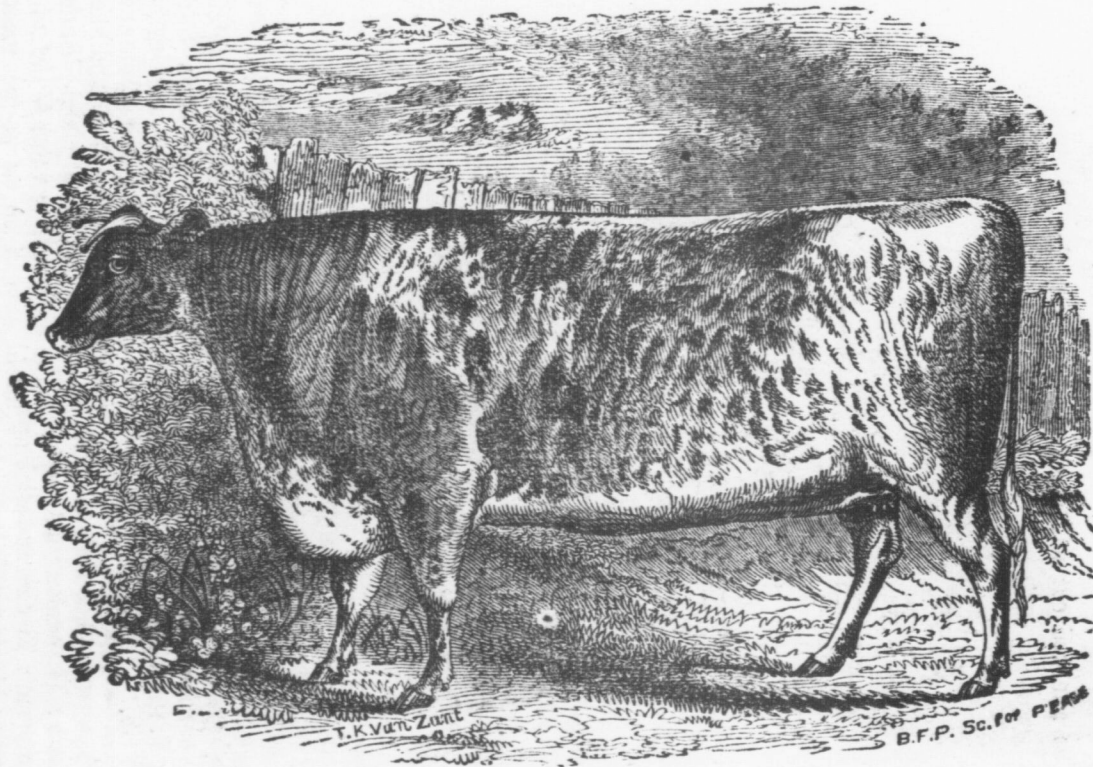
### BAKER'S PATENT FARM GATE.



*Self-Balancing Gate*.—The above is a cut pushing to the right and left. It may be of a self-balancing farm gate invented by made of wood or iron, and costs little more Mr. Anson Baker, of Western, N. Y., and is than a pannel of fence. When shut it has represented in the sketch as partly open, the appearance of one of the pannels. It is It has been in use some time in Western peculiarly convenient in winter, those using and the neighbouring towns, and is much it not being obliged to clear away the snow liked. It runs on rollers inserted in the in order to open or shut it, nor can it be csts, under the upper slat. It is opened by swayed to fro by the winds.



A DURHAM BULL.

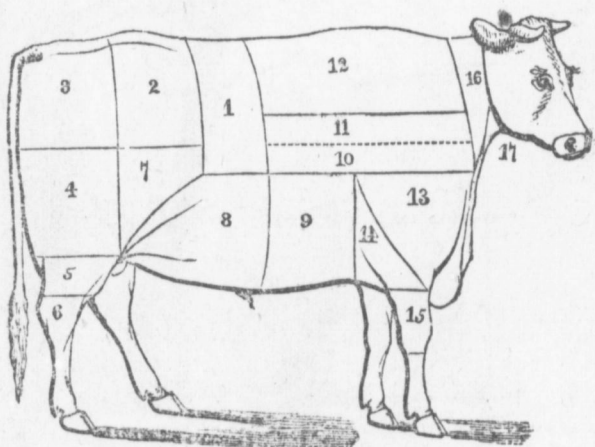


A DURHAM COW.

### DIFFERENT MODES OF CUTTING UP AN OX.

It may be useful to see the mode of cutting up the carcass of an ox in London. The provisions exported from that metropolis rule the trade in the West India Islands, and in other distant places abroad. It is very proper, therefore, that American packers should understand the English methods.

The annexed cut will show the London mode :



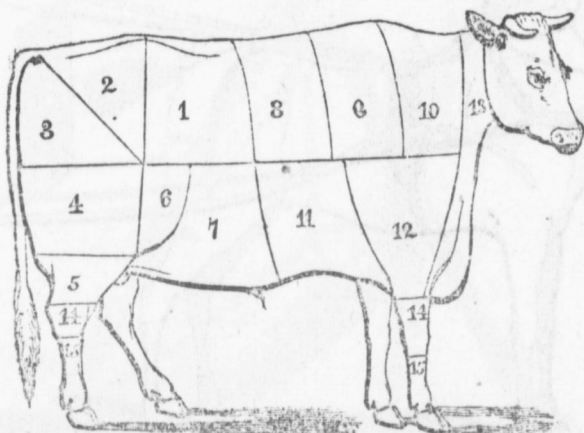
*Hind-quarter*—1, loin ; 2, rump ; 3, itch or adze-bone ; 4, buttock ; 5, hock ; 6, thick flank ; 7, thin flank, 8, fore rib.

*Fore-quarter*—9, middle rib ; 10, chuck rib ; 11, brisket ; 12, leg of mutton piece ; 13, clod and sticking and neck ; 14, shin ; 15, leg.

The relative value of these different cuts of an ox may be stated at their current value, viz : when the rumps, loins, and fore ribs of a fine ox fetch 8d. a pound, the thick flank,

buttock and middle rib will fetch 6d. ; the itch or adze bone, thin flank, chuck rib, brisket, and leg of mutton piece, 5d. ; the clod and sticking and neck, 3d. ; and the legs and shins, 2d. a pound. Such is the difference in value of the different cuts of an ox in the meat markets in London. As an object of comparison, we shall also give a figure of an ox cut in the Edinburgh method, as in figure 2, and the great difference between both methods may be seen at a glance.

FIGURE 2.



*Hind-quarter*—1, surloin, or back eye; 2, hock bone; 3, buttock; and 4, large round rump; 5, small rump; 6, hough; 7, thick flank; 8, thin flank 9, nine holes.

*Fore-quarter*—10, large runner; 11, small runner; 12, square rib, or fore sye; 13, brisket; 14, shoulder lyer; 15, nap or shin; 16, neck; 17, sticking piece.

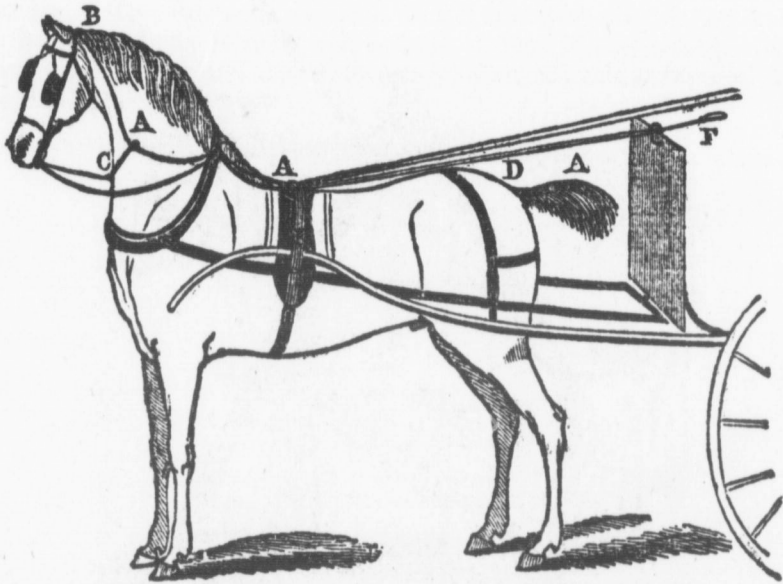
It is therefore obvious that of the two methods of cutting up beef, London affords much more of the valuable pieces out of the same carcass; and of course more money would thereby be realised from it.

It is well to observe that the greatest attention should be paid to making the brine or pickle, whether for beef or pork. Pure water should be used in its manufacture; for the sediment from that

which is impure, will settle down upon the meat, and give it a bad colour and a slimy feel. Where river or rain water is used, (and soft water should always be preferred it.) would be exceeding desirable to filter it through sand, or at least to strain it. A great deal of beef and pork is utterly unfit for exportation by the use of unfiltered water in making the brine.

“In packing provisions, the tierces, barrels, &c., should be made with great care and neatness. Clean handsome ash staves are preferred and of such other hard, close grained wood as will not stain the meat. Tierces should have four iron hoops, or three—one at each bilge and one at each chime; barrels with an iron hoop at each chime. The fuller hooped the barrel or tierce is, the better.”

## SAFETY REIN.



We give above a cut of this invention, copied from the Spirit of the Times. It will be seen that the operation of it is, to choke the horse; so as effectually to subdue his running disposition, whether it proceeds from vice or fear. Any one who has read of the catching and taming the wild horses of South America, knows the power which is soon obtained over them by means of the all potent lasso. With it, in a very little time, the most high spirited and ferocious of these "lordly racers of the wild" are subdued and rendered obedient as kittens. Its operation is so sudden and effectual, that it astonishes and overwhelms the animal, and renders him totally powerless for evil or resistance.

It will be seen that it is wholly simple, and little more expensive or inconvenient than the check rein.

The rein, it will be seen, is fastened to a hook on the top of the head at B, and the other end at F. The strap C crossing the throat, through the loops of which, at either end, the reins pass, is the one which does the work. The man in the vehicle, by pulling on the

reins at F, tightens the cord C, and by choking the animal, puts mischief out of his power.

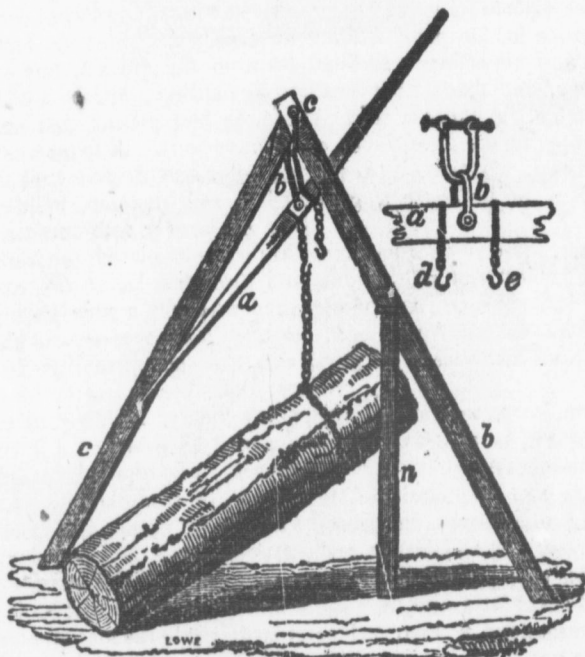
*Directions for using the Safety Rein*

—In putting on the rein for a gig, keep the buckle to the left hand, or near side. That will place the loop which is on the middle of the rein, below the hook or head of the bridle, which prevents it from being thrown out by the motion of the horse's head. For a pair of horses, keep the two short chapes outmost, and the loops on the middle downward. For saddle, keep the buckle to the left hand

To derive the full benefit of this rein, it is recommended after the horse has been a few times firmly gripped with it, to use it occasionally, and it should frequently be used instead of the bit-rein to stop him on ordinary occasions; this will remind the horse of this subjection, and will accustom the rider or driver to the ready and accurate use of it in case of an emergency.

By attending to these directions, the most troublesome horse will, to a certainty, become quiet and manageable

## A LOG LOADER.



It consists of a double acting lever, *a*, 10 feet long, suspended in the middle by the clevis, *c*, which is hooked in the clevis, the bolt of which passes through the upper end of two shear poles which admits them to open and shut as best suits. The hooks *d* and *e* are placed 2½ inches from the fulcrum, connected to the staple by a link and swivel, which enables the hooks to be turned in the links of the chain either way. The shear poles may be of a length 'suited' to the weight and height of the object to be raised. For loading logs on a wagon, they should be 6½ feet; if it is a short or round object, a third shear pole should be set against a pin in one of the other legs. The machine is to be placed over the object to be raised; a chain is then to be placed around it, one end of which is fastened to one of the hooks of the lever, the lever is then worked, and the hooks to be hooked one below the other alternately.

## IMPORTANCE OF WELL DIRECTED LABOUR.

"What great effects from little causes spring,  
What wealth does well directed labour bring."

A single stroke of an axe is of little consequence; yet by the continual application of that small power, properly directed, what amazing effects are produced; the sturly oak and lofty pine do not simply own its power, but whole forests before it, and the wilderness becomes a garden.

Industry well directed, will give a man a competency in a few years. The greatest industry misapplied is useless.

As an example, there is my neighbour, Seth Steady, the Blacksmith, is not only an industrious man, but his industry is applied to one object. His hammer is heard at dawn of day, and the fire blazes in his shop during the evenings, from the 20th of September

to the 20th of March. Go to this shop at any time in the day for any kind of work, you are sure to be waited upon. The consequence is, his purse is filled with dollars, and his cellars well filled with provisions, and that's what I call quite comfortable. Although suitably liberal, and enjoying the good things of life as he goes on, ten years of health will enable him to purchase a good farm.

As a contrast, there is my friend Nat Notional, the busiest and most industrious mortal in existence; as the old saying is, "he has too many irons in the fire," and with all his industry he goes behind-hand.

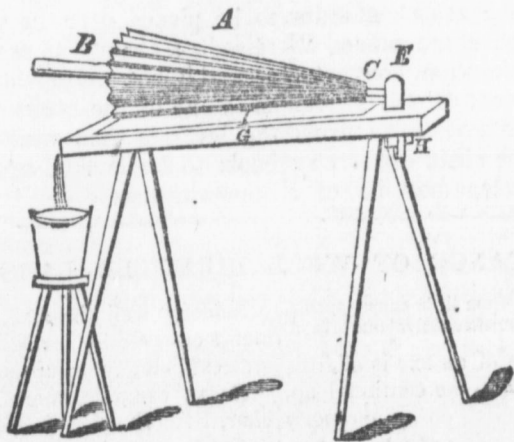
He has a farm, but instead of pursuing the cultivation of it, he seizes on every new project that occurs.

A few years ago he concluded to give up the dairy business, in consequence of the low price of butter and cheese; sold his cows at a low figure, and purchased sheep at a high rate for wool then commanded a high price. By the time he got fairly into the raising of wool, down went the price of wool, and up went the price of butter and cheese. He then sold his sheep and

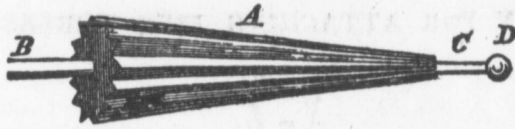
purchased cows again, for cheese was up, and wool was down. Last year, after sowing a number of acres of grain, he resolved to rent his farm, sell the grain on the ground, buy a team and go to hauling; for, by a nice calculation, he had proved that money might be made by it. A team was procured; but after one or two trips, he concluded to sell his team, build a saw-mill, and go largely into lumbering. The dam was completed, the irons procured and three-fourths of the expenses incurred when by a nice calculation, (for no one makes *nicer* calculations,) he found that an oil mill would afford the best profit; and to work he went with great industry, building an oil-mill. I happened to go there a few weeks afterwards, and the whole organization of the mill was undergoing an alteration, to fit it up for cotton and woollen manufacture.

A quizzical friend intends to propose to him to abandon that project and enter largely into the manufacture of flour, and I have no doubt that he will readily accede to the proposal. So with all his industry and expense, he is neither benefiting himself nor the public.

### BUTTER WORKER.



A, fluted roller, 24 inches long, 8 inches in diameter at handle, tapering to 2 inches at the shank; 16 flutes or creases, worked to an edge so deep as to make the inside of the flutes a right angle running out to the surface of the shank.



B, handle; straight, seven and a half inches long, and two inches diameter.

D, ball; two inches in diameter.

C, shank: five inches long, one and quarter in diameter.

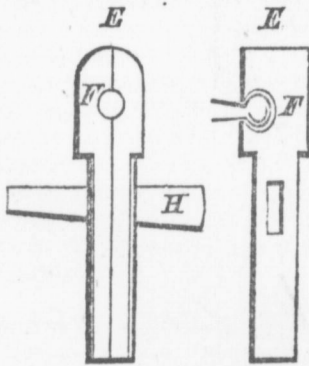
E, socket block, made of two pieces each  $3\frac{1}{2}$  by  $1\frac{1}{2}$  inches, shouldered to rest on the top of table, passing through, secured by a key wedge through both parts lengths so as to bring the bottom of the roller fair upon the block.

F, socket turned into the block,  $\frac{1}{2}$  the socket in each part, 4 inches from the top, to enclose and confine the ball, which should, however, work freely

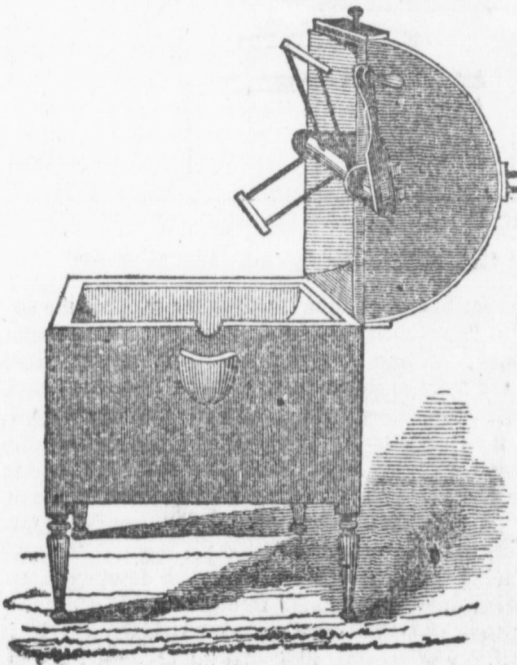
G, table, inclined.

H, wedge key, to secure the socket block firmly to the table.

I, marble-block, 24 inches square, around it a gutter cut in the table to receive the buttermilk, and conduct it to central point, where it can pass off in one stream.

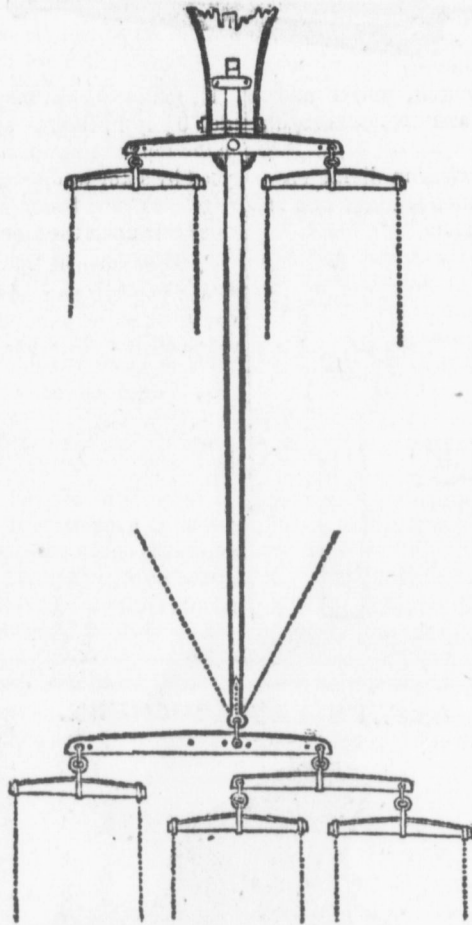


### GAULT'S PATENT CHURN.



This implement has been in use for several years, and many persons consider it the most approved and convenient Churn now used. The particular advantages claimed for it over other patent churns, are — "the facility with which it can be worked, from its quick and powerful motion; the ease with which it can be cleaned; and that it is not liable get out of order.

## PLAN FOR ATTACHING FIVE HORSES.



## GRAFTING.

The great number of modes described in books, have tended rather to bewilder than to enlighten beginners; the following remarks, therefore, are more for the purpose of laying down *reasons* on which success depends, than for pointing out the particular modes of the operation, provided attention is given to the essential particulars.

Propagation by grafting differs mainly and essentially from increasing by cuttings, by inserting the cutting into the growing stock of another tree, instead of directly into the soil. The

stock thus supplies the sap, as the soil does in the case of a cutting, and the graft, instead of making roots of its own extends its forming woods downwards, through the inner bark, into the stock itself. Hence there are two chief requisites for success: the first, that the graft be so set in the stock, that the sap may flow upwards without interruption; and the second, that the forming wood may flow downward uninterrupted through the inner bark. To offer these two requisites, it is needful, first, that the operation be per-

formed with a sharp knife, that the vessels and pores may be cut smoothly and evenly, and the two parts be brought into immediate and even contact. *Secondly*, that the operation be so contrived that a permanent and considerable pressure be applied to keep all parts of these cut faces closely together. *Thirdly*, that the line of division between the inner bark and the wood, should coincide or exactly correspond in each; for if the inner bark of the one set wholly on the wood of the other, the upward current through the wood and back through the bark, is broken, and the graft cannot flourish or grow. And, *fourthly*, that the wounded parts made by the operation, be effectually excluded from the external air, chiefly to retain a due quantity of moisture in the graft, but also to exclude the wet, until by the growth of the graft the union is effected.

1. The first requisite is best attained by keeping a keen, flat-bladed knife to cut the faces, and another knife for other purposes.

2. The second requires that the jaws of the stock in cleft-grafting, press with some force, but not too much, against the wedge-shaped sides of the graft. A stock one-third of an inch in diameter will some times do this sufficiently; three-quarters of an inch is a more convenient size. In whip-grafting, the tongue and slit should be firmly crowded or bound together.

3. The third requisite is attained by close examination.

4. The fourth is accomplished by plasters of grafting-wax, and by the application of grafting-clay. Grafting wax may be made by melting together one pound of beeswax, two of tallow, and four of rosin.\* It is spread, when melted or softened, on muslin or thin unsized paper, with a brush or spatula. It is sometimes applied without plasters,

\* More wax and less rosin is less adhesive to the hands, but more expensive.

in which case it should be worked with wet hands, until it may be drawn into ribbons of wax, which are wrapped round the part. In all cases it should be applied closely, so as to allow if possible no interstices, and covering cut or split surface otherwise exposed to the air. In cool weather, a lantern, chafing-dish, or hot brick, is necessary to soften the plasters before applying them.

The annexed figures represent the two most common modes usually adopted for fruit trees; fig. 37, representing whip-grafting, which if well performed with the parts closely pressed together, needs no ligature to keep the graft in its place; and fig 38, the common mode or cleft-grafting, which except for small stocks is generally found best and most certain of success.

Fig. 37 Fig. 38.



It is hardly necessary here to mention that propagation by grafting and by cuttings is to be performed early in spring before the buds swell; and that the grafts or cuttings may be cut late in autumn or any time during winter, provided the natural moisture is preserved until used. A convenient mode of thus preserving them, is to wrap or imbed them in damp, not wet moss; or bury them in a box, beneath the surface of a dry spot of earth, the box to be open downwards, and the grafts to be kept from contact with the earth by sticks across the inside of the box.

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