

THE BUCKEYE

ANNUAL

1882

ILLUSTRATED

PUBLISHED BY



AULTMAN & CO.,

CANTON, OHIO.



MILLER'S BUCKEYE WIRE BINDER

Is the most perfect product of invention in Wire Binding Machines.

It has fewer gears and fewer parts than any other binder.

It has greater durability and reliability in binding.

Makes round bundles and consumes the least wire.

Ties as tightly as the wire will admit of.

As easily handled as any reaper.

Is raised or lowered as easily as any reaper.

Saves all the grain, whether straight or tangled.

Works better in wet and tangled grain than any other.

Saves crops cheaper and easier, and in better shape.

Requires less horse power than any other.

Has the simplest and best form of compressor.

Has the best adjustable reel.

Elevators have larger capacity than those of any other binder.

No binder is more perfectly balanced.

Binds long and short grain with equal facility.

Makes bundles automatically, or at will of driver.

Threshes no grain in process of binding.

(See description of the **BUCKEYE TWINE BINDER** on another page of this pamphlet.)

THE best means of judging which machine you would prefer is to see samples of each kind and witness the operation of each. Inasmuch as personal inspection of our machines is not always possible, we issue every year a Descriptive Circular containing a brief description of the peculiar construction of our machines. In this copy, our pamphlet for 1882, we have included an Almanac, the utility and artistic beauty of which will secure for it a cordial welcome in thousands of American homes.

All of our Harvesting Machines, whether mowers, reapers or binders, are known as

BUCKEYE MACHINES.

THEY ARE :

THE BUCKEYE TWINE SELF-BINDER.

THE BUCKEYE WIRE SELF-BINDER.

THE BUCKEYE HAND-BINDING HARVESTER.

THE BUCKEYE MOWER AND TABLE-RAKE
COMBINED (Side-delivery Reaper).

THE BUCKEYE MOWER AND DROPPER
COMBINED (Rear-delivery Reaper),

THE BUCKEYE INDEPENDENT REAPER.

THE BUCKEYE MOWER.

We have introduced engravings illustrating each machine, and have given a brief space to the description of each. To intending purchasers who may wish for information not contained in these pages we extend an invitation to ask the same of us or of our agents by letter, assuring them that we will take all reasonable pains to answer every inquiry satisfactorily.

As we have before intimated, personal examination is greatly to be preferred; and if every farmer could see and examine the Buckeye before purchasing we should be more than satisfied to abide by the verdict, whatever competitive methods might be brought to bear.

We aim to make the Buckeye, in all its forms, as nearly a perfect machine as our long experience with them in favorable and unfavorable crop conditions, combined with the best skill and most advanced mechanism will render possible. With this end in view, we are constantly improving one or the other of our machines. For the harvest of 1882 the most radical change will be the adoption of the Appleby attachment for twine binding.

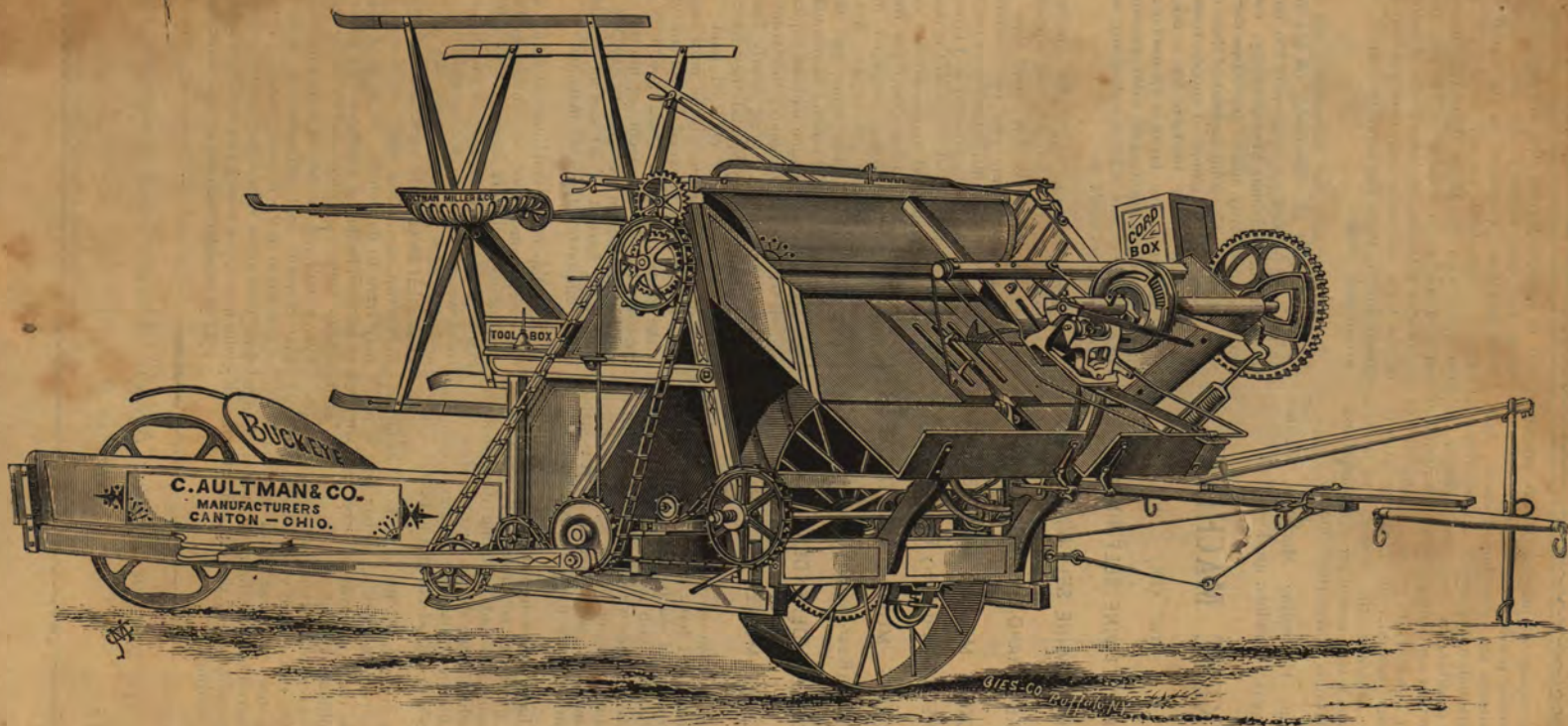
It is beyond dispute that this apparatus in its latest and best shape is the most satisfactory twine machine yet placed in the hands of the farmer. Henceforth we will furnish the Buckeye either with the Miller Wire Attachment, the simplest and most reliable self-binder ever invented, or with the Appleby Twine Attachment, of the latest and most improved pattern, as obtained directly from the inventor himself, as our patrons may prefer.

Those who seek the substantial and undeniable proofs of the superiority of any line of machines in printed pages are only too liable to be mistaken. Claims to superiority, even to matchless superiority and to perfection itself, are easily printed. The solid support of these claims by an uninterrupted career of success from 1856 until now is what the Buckeye has to offer. It is the verdict of the farmers themselves, and furnishes our patrons a more valid guarantee of the real value of our machines than any number of printed pages could do.

The foremost rank which the novelty and superiority of the Buckeye achieved immediately upon its invention has been more than maintained; each succeeding year has extended the field of its triumphs, until it has been everywhere recognized as the leading Grain and Grass Cutting Machine of the World. Of all the machines that were manufactured a quarter of a century ago not one survives to-day except the Buckeye Mower. Of all the houses engaged in such manufacture twenty-five years ago C. AULTMAN & Co. only remain. The same men who invented the Buckeye still control its manufacture. They invented the machine without capital, and made it with their own hands; the farmers have furnished the capital, buying nearly four hundred thousand Buckeyes, and they have introduced them into every civilized land. Thousands of prizes, including all the most important in the world, have crowned its brilliant victories in the competitive field. Yet, though the Buckeye is the largest manufacturing interest of harvesting machines in existence to-day, the beginning of the harvest of '81 saw all its vast warehouses emptied of their last machine.

The indispensable conditions of such a successful career must ever be: machines that are superior to all others in respect to safety and convenience; machines that are durable, easy on the driver and his team, without defective balance and side draft; and machines that the farmer knows that he can rely upon after he has entered his harvest, no matter what condition of crop he may have to encounter. If we give expression to our own feeling of assurance that all these conditions have been successfully met by the Buckeye, it will not be denied that this feeling has that powerful and indispensable support—the appreciation of the farming public. It is, therefore, with entire confidence that we invite farmers who intend purchasing machines for the harvest of 1882 to consider well the claims of the Buckeye.

In ordering copies of this Buckeye Almanac and Catalogue please refer to it as No. 27.



THE BUCKEYE TWINE BINDER.

THE BUCKEYE TWINE BINDER.

THE operation of the Buckeye Twine Binder is very simple. As the cut grain is discharged from the elevator of the harvester it is taken by two arms driven by cranks, called packers. The function of these packers is to pack the grain which is delivered by the elevator aprons into a bundle ready for tying. The grain is packed against a trigger. At the moment when the weight packed against the trigger exceeds the reacting pressure of a spring the bundle is sized, and a catch is released which throws the tying apparatus into gear. The arms from both sides at once close upon the bundle of straw, compressing it tightly, so that at the moment of tying there is little, if any, tension on the string. All the grain is cut and saved, none is wasted, and the butts of the bundle are brought evenly together by an adjuster or butter. The butter is an endless band running over two rollers placed at right angles to the platform in such a way as to aid in delivering the grain to the compressors, so that the butts of the sheaf are more or less square, and the sheaf always tied at the same distance from the end. By adjusting a set screw the binder can be set to bind a bundle of any desired size. The tension can be altered so as to bind as tightly as can be wished. After the machine has been prepared to do the work in such a manner as the operator may wish, every bundle delivered from the machine will be of the same size, and all will be bound equally tight.

If the grain is tangled, the packers straighten out the straws, and, in conjunction with the butter, a very good sheaf is made even in down grain. A drop-table holds the sheaf until it is bound, and then falls down until the bundle is discharged. The slow and regular motion of two arms force the bundle gently away from the unbound grain, without wasting or shelling ripe grain. The distance the bundle has to fall is small, so that the separation is as neat, economical and perfect as it can possibly be.

The knot-tying apparatus is very durable. All

the small working parts are made of cast steel. It remains entirely at rest while the packers are collecting the bundle, after which it is the operation of only a moment to put on the band. This binding attachment has now been used through five harvests, and has given the best satisfaction of any twine machine yet constructed. In connection with the Buckeye Harvester, and with the improvements added and tested in the harvest of 1881, and now for the first time made available to the farmer, it is the most efficient, reliable and durable twine machine made.

It is more simple and more durable, having fewer parts than any other.

It is entirely automatic, leaving the driver only his team to look after.

It is the lightest and strongest binder in the field.

The bundles are all made any desired size, and exactly the same size, and are all bound as tight as the driver may wish, and all equally tight.

The packers make quite a neat sheaf, even out of tangled grain.

It does not get out of time.

There is no gear to be looked after, as the binder mechanism will only start when the required quantity of grain is under the packers.

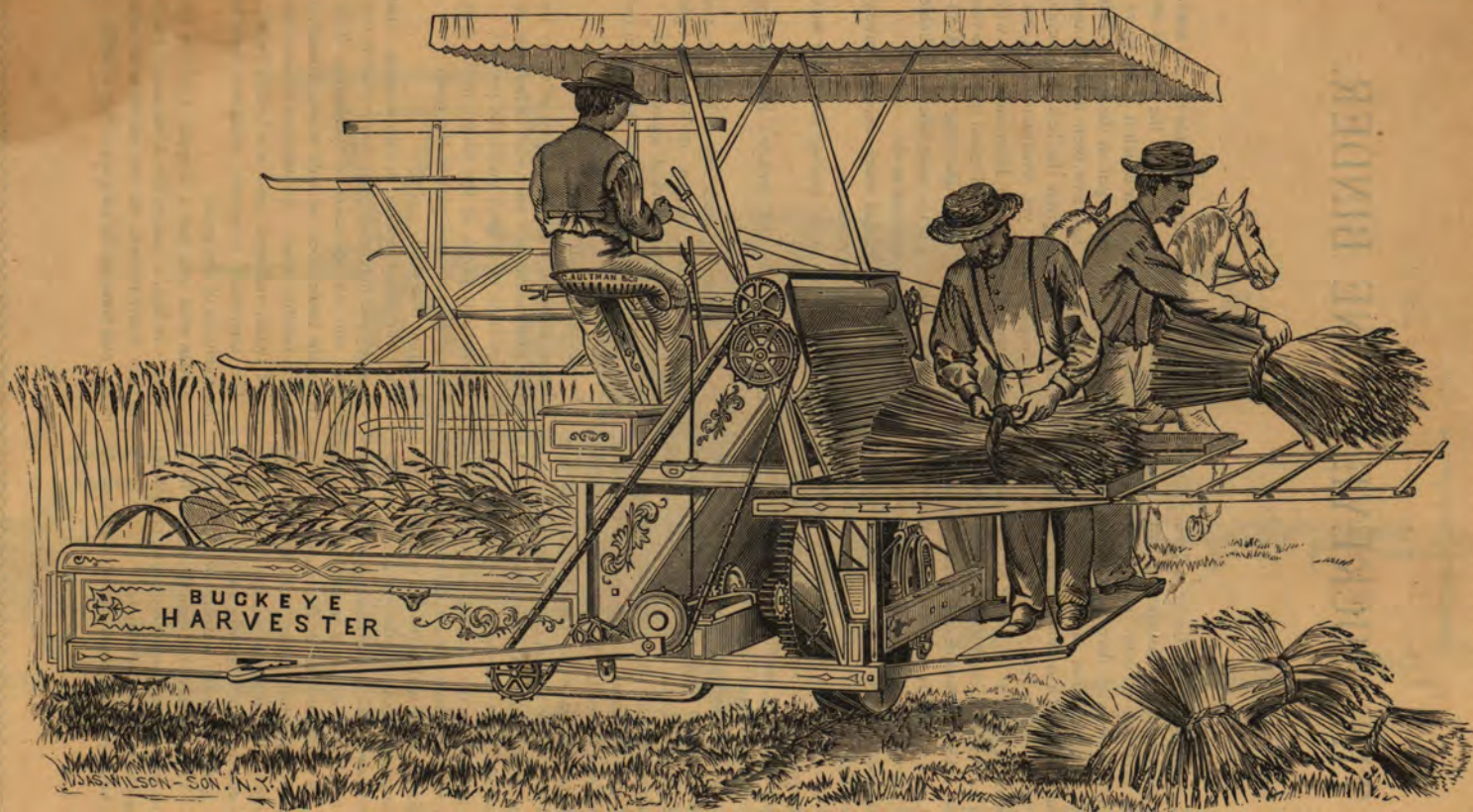
The wear is small, as the binder works comparatively only a small part of the time.

No grain is wasted.

The twine is not strained in compressing—that is done by the machine. The compressor is very simple, and its operation is perfection itself. Hence the twine need be only strong enough to make a reliable band. No machine is more saving of twine, and none can use a lighter twine.

The separation is perfect, whatever may be the condition of the grain.

A man who can run a dropper can run this binder—in fact, it leaves the driver much less to do than many reapers, for the machine is automatic, and controls its own operation entirely.



THE BUCKEYE HARVESTER.

The Buckeye Harvester.

The Buckeye Harvester for hand binding is very strong, simple and durable, and effects a large saving of labor and grain over ordinary reapers. It is furnished with a serrated knife. A smooth or flax knife is furnished when specially ordered.

Levers enable the driver to move the reel, both laterally and vertically, to any required point without stopping the team; also to raise the cutter-bar, or place it as close to the ground as he wishes.

By the aid of our Reel and Lever, tangled grain is all cut and saved. It is all delivered to the binders, and is handled much more satisfactorily and expeditiously than by self-rakes.

The large drive-wheel is all of wrought iron, and is light and strong, its tractile power being much increased by the use of iron cleats.

The weight of the machine is well balanced over the wheel so that there is no side-draft, or weight on the horses' necks. A worm gear worked by a simple crank enables the driver to raise or lower the machine without the slightest difficulty.

The parts are driven by chains, which work well in all kinds of weather. The binder's table is folded by one man to pass an eleven-foot gate.

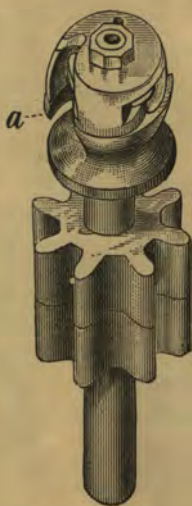
It is not possible that any machine could ever have given more perfect satisfaction to farmer, agent or manufacturer than this. In lightness, strength and balance it leaves absolutely nothing to be desired. The canvas platform and elevating aprons save all the grain. They are self-adjusting, do not clog in any condition of grain, and will handle any crop perfectly well, no matter how long or how much tangled. The superior merit of the Buckeye in cutting and elevating has been signally demonstrated time and again by its successful handling of heavy, laid crops, where other harvesters had failed utterly.

The Buckeye Harvester is built for hand binding, in which case it requires three men—one driver and two binders;

Or it is furnished as a complete automatic wire-binder, by the substitution of our wire-binding attachment in place of the hand-binder's table;

Or it is furnished as a complete twine-binder, by the addition of our twine-binding attachment.

Miller's Buckeye Wire-Binder.



No mechanical invention more remarkable than the Miller wire-binding apparatus has ever appeared. This is conceded by all who have seen it in operation. It is a marvel of beauty, simplicity and efficiency. In respect to fewness of parts, durability and capacity for doing first-class binding with the least amount of material, it is without any rival.

The small cut shows the twister-head, all there is of it. This small apparatus holds the end of the wire, makes the twist and cuts off. The motion of holding and cutting off is so slight that the wear is practically nothing.

All other devices require frequent adjustment, involving, as they do,

much friction and wear, and early failure as the certain consequence.

No wire is wasted. There being no clamping or holding device between the twist and the bundle, the wire is twisted solidly against the bundle.

With this machine one man should cut and bind at least one acre an hour; its average performance is much greater. Twenty acres a day is not at all unusual.

The material used is No. 20 annealed steel wire. This we furnish to the farmer as cheaply as it can be manufactured in very large quantities. The machine saves more grain than suffices to buy the wire used in binding.

Bundles may be delivered automatically every twelve feet, or every sixteen feet, or may be sized at will by the driver.

Only one tie is made on each bundle, and the least possible amount of wire is used. The least wire is consumed by making large sheaves, and the sheaves may be made as large as can be handled, and bound as tight as the strength of the wire will admit of.

The driver has within his easy reach the levers required to operate the Harvester; also a foot lever to size the bundle at will, and a handwheel to adjust the place of binder to different lengths of grain. He has no need to stop his machine or leave his seat except to oil up now and then.

With the binder is furnished a band-cutter, wrench and all the usual extras; also the full and complete warranty of the house that the machine will work as represented.

Owing to its reliability, and to its saving and lasting qualities, the Buckeye Wire-Binder has obtained a hold on the confidence of farmers that cannot be shaken; and we are already at work upon unexpectedly large orders for delivery in 1882. Like the Buckeye Mower and Table-Rake, "it has come to stay." No farmer ever regretted buying this machine.

(See illustration on 2d page of cover.)



BUCKEYE ALMANAC FOR 1882.

PRESENTED WITH THE COMPLIMENTS OF

C. AULTMAN & CO.,

MANUFACTURERS OF

Buckeye Harvesting Machinery,
CANTON, OHIO.

WITH TABLES
CALCULATED FOR
THIS LATITUDE.



ILLUSTRATED BY
LEADING ARTISTS,
MOSTLY AMERICAN.

CALENDAR.

1882	S	M	T	W	T	F	S	1882	S	M	T	W	T	F	S	1882	S	M	T	W	T	F	S
JAN.	1	2	3	4	5	6	7	MAY.	..	1	2	3	4	5	6	SEPT.	..	..	..	..	1	2	
	8	9	10	11	12	13	14		7	8	9	10	11	12	13		3	4	5	6	7	8	9
	15	16	17	18	19	20	21		14	15	16	17	18	19	20		10	11	12	13	14	15	16
	22	23	24	25	26	27	28		21	22	23	24	25	26	27		17	18	19	20	21	22	23
	29	30	31	..	..	..	..		28	29	30	31	..	..	..		24	25	26	27	28	29	30
FEB.	..	..	..	1	2	3	4	JUNE.	..	..	..	..	1	2	3	OCT.	1	2	3	4	5	6	7
	5	6	7	8	9	10	11		4	5	6	7	8	9	10		8	9	10	11	12	13	14
	12	13	14	15	16	17	18		11	12	13	14	15	16	17		15	16	17	18	19	20	21
	19	20	21	22	23	24	25		18	19	20	21	22	23	24		22	23	24	25	26	27	28
	26	27	28	..	..	..	..		25	26	27	28	29	30	..		29	30	31	..	..	..	..
MAR.	..	..	..	1	2	3	4	JULY.	..	..	..	..	..	1	..	NOV.	..	..	1	2	3	4	
	5	6	7	8	9	10	11		2	3	4	5	6	7	8		5	6	7	8	9	10	11
	12	13	14	15	16	17	18		9	10	11	12	13	14	15		12	13	14	15	16	17	18
	19	20	21	22	23	24	25		16	17	18	19	20	21	22		19	20	21	22	23	24	25
	26	27	28	29	30	31	..		23	24	25	26	27	28	29		26	27	28	29	30	..	..
APRIL.	..	..	..	..	..	..	..	AUG.	30	31	..	..	..	..	..	DEC.	..	..	..	..	1	2	
	2	3	4	5	6	7	8		..	..	1	2	3	4	5		3	4	5	6	7	8	9
	9	10	11	12	13	14	15		6	7	8	9	10	11	12		10	11	12	13	14	15	16
	16	17	18	19	20	21	22		13	14	15	16	17	18	19		17	18	19	20	21	22	23
	23	24	25	26	27	28	29		20	21	22	23	24	25	26		24	25	26	27	28	29	30
	30	..	..	..	..	..	..		27	28	29	30	31	..	..		31	..	..	..	..	..	..

C. AULTMAN & CO. are most happy in handing you this Beautiful Annual, hoping that its artistic and interesting pages may not only induce you to consider carefully the merits of their widely celebrated BUCKEYE HARVESTING MACHINES ; but that, as they shall beam on you daily throughout the year 1882, they may be to you a continual source of pleasure and profit.



ECLIPSES, Etc.

In the year 1882 there will be two Eclipses of the Sun, no Eclipse of the Moon, and a Transit of Venus over the disk of the Sun.

I. A Total Eclipse of the Sun, May 17, not visible in America, the line of totality passing across Africa and Asia, and visible as a Partial Eclipse in Europe.

II. An Annular Eclipse of the Sun, November 10, not visible in America, the principal phases being confined to the Southern portions of the Pacific Ocean.

III. A Transit of the planet Venus over the disk of the Sun, on December 6, visible throughout the United States. There will be four contacts of the circular disks, or limbs, of the Sun and planet, namely, a *first external* contact of the limbs, and then, after an interval of about twenty-one minutes of time, the second contact, or *first internal* contact will take place. After an interval of about six hours, the third contact, or *second internal* contact will take place; and, about twenty-one minutes after the third, the fourth contact, or *second external* contact, will complete the Transit.

PLANETS BRIGHTEST.

Venus, November 1. Jupiter, December 18.
Mars, not this year. Saturn, November 14.

Mercury is brightest, or *best seen*, at the following dates: February 6, after sunset; March 21, before sunrise; June 1, after sunset—very favorable for observations; July 19, before sunrise; September 28, after sunset; November 7, before sunrise.

THE FOUR SEASONS.

Winter begins December 21, 1881, at 10.52 A. M., and lasts 89 days, 1 hour and 4 minutes.

Spring begins March 20, 1882, at 11.56 A. M., and lasts 92 days, 20 hours and 12 minutes.

Summer begins June 21, 1882, at 8.08 A. M., and lasts 93 days, 14 hours and 22 minutes.

Autumn begins September 22, 1882, at 10.30 P. M., and lasts 89 days, 18 hours and 15 minutes.

Winter begins December 21, 1882, at 4.45 P. M.
Tropical year, 365 days, 5 hours and 53 minutes.

MOVABLE FEASTS.

Septuagesima Sunday.....	February 5
Sexagesima Sunday.....	" 12
Quinquagesima Sunday.....	" 19
Ash Wednesday.....	" 22
Quadragesima Sunday.....	" 26
Mid-Lent.....	March 19
Palm Sunday.....	April 2
Good Friday.....	" 7
Easter Sunday.....	" 9
Low Sunday.....	" 16
Rogation Sunday.....	May 14
Ascension Day.....	" 18
Whit Sunday.....	" 28
Trinity Sunday.....	June 4
Corpus Christi.....	" 8
Advent Sunday.....	Dec. 3

CYCLES.

Dominical Letter.....	A
Epact.....	11
Golden Number.....	2
Solar Cycle.....	15
Roman Indiction.....	10
Julian Period.....	6595
Dionysian Period.....	211
Jewish Lunar Cycle.....	18

MORNING AND EVENING STARS.

Morning Stars.—Mercury, until January 6, and from February 22 to May 2; also from June 28 to August 14; also from October 22 to December 17. Venus, until February 20, and after December 6 to the end of the year. Mars, from March 2 to Dec. 27. Jupiter, from Jan. 21 to August 27. Saturn, from Jan. 21 to July 29.

Evening Stars.—Mercury, Jan. 6 to Feb. 22; also from May 2 to June 28; also from Aug. 14 to Oct. 22. Venus, Feb. 20 to Dec. 6. Mars, Jan. 1 to Feb. 24. Jupiter, Jan. 1 to 19, and from Aug. 29 to Dec. 27. Saturn, Jan. 1 to 19, and from July 30 to Dec. 27.

RATES OF POSTAGE.

First-Class.—Letters, sealed packages, matter wholly or partly in writing, except book manuscript and corrected proofs passing between authors and publishers, and except local and drop letters, or postal cards—*three cents for each half ounce, or fraction thereof.* On local or drop letters, at offices where free delivery by carriers is established, *two cents for each half ounce or fraction thereof*; where free delivery by carriers is not established, *one cent for each half ounce or fraction thereof.*

Second-Class.—On all newspapers and periodical publications mailed from a known office of publication or news agency, and addressed to regular subscribers or news agents, *two cents a pound or fraction thereof* on all issued weekly and oftener; issued less frequently, *three cents a pound or fraction thereof.* County papers, to actual subscribers in county, *free.*

Third-Class.—*One cent for two ounces* on almanacs, books (printed), calendars, corrected proofs, handbills, magazines, when not sent to regular subscribers, maps (lithographed or engraved), music (printed sheet), newspapers (when not sent to subscribers), occasional publications, pamphlets, posters, proof-sheets, prospectuses, and regular publications designed primarily for advertising or for free circulation, or for circulation at nominal rates. *One cent for each ounce* on blank books, blank cards, book manuscript between authors and publishers, card boards and other flexible material, chromos, circulars, engravings, envelopes, flexible patterns, letter envelopes, letter paper, lithographs, merchandise, models, ornamented paper, postal cards—in bulk and not addressed—photographic views, photographic paper, printed blanks, printed cards, sample cards, samples of ores, metals, minerals and merchandise, seeds, cuttings, bulbs, roots and scions, and stereoscopic views.



ON THE WATCH. — Specht.



JANUARY



Year Day.	Month Day.	Week Day.	Noon Mark. — Wash'ton M. Time.			Sun Rises.	Sun Sets.	Moon Sets.	Moon's Phases.
1	1	S	H. M. S.	H. M.	H. M.	H. M.	H. M.	H. M.	
2	2	M	12 4 0	7 25	4 44	4 53	4 53	4 53	
3	3	Tu	12 4 27	7 25	4 45	5 47	5 47	5 47	
4	4	W	12 4 55	7 25	4 46	6 35	6 35	6 35	
5	5	Th	12 5 22	7 25	4 46	7 17	7 17	7 17	
6	6	Fr	12 5 49	7 25	4 47	rises.	rises.	rises.	
7	7	Sa	12 6 15	7 25	4 48	7 16	7 16	7 16	
8	8	S	12 6 41	7 24	4 49	8 14	8 14	8 14	
9	9	M	12 7 6	7 24	4 50	9 12	9 12	9 12	
10	10	Tu	12 7 31	7 24	4 51	10 9	10 9	10 9	
11	11	W	12 7 56	7 24	4 52	11 7	11 7	11 7	
12	12	Th	12 8 19	7 24	4 53	morn.	morn.	morn.	
13	13	Fr	12 8 42	7 23	4 54	0 7	0 7	0 7	
14	14	Sa	12 9 5	7 23	4 56	1 8	1 8	1 8	
15	15	S	12 9 27	7 22	4 57	2 11	2 11	2 11	
16	16	M	12 9 48	7 22	4 58	3 15	3 15	3 15	
17	17	Tu	12 10 9	7 22	4 59	4 17	4 17	4 17	
18	18	W	12 10 28	7 21	5 0	5 18	5 18	5 18	
19	19	Th	12 10 48	7 21	5 1	6 11	6 11	6 11	
20	20	Fr	12 11 6	7 21	5 2	sets.	sets.	sets.	
21	21	Sa	12 11 24	7 20	5 3	6 43	6 43	6 43	
22	22	S	12 11 41	7 20	5 5	7 58	7 58	7 58	
23	23	M	12 11 57	7 19	5 6	9 13	9 13	9 13	
24	24	Tu	12 12 12	7 18	5 7	10 24	10 24	10 24	
25	25	W	12 12 27	7 17	5 8	11 34	11 34	11 34	
26	26	Th	12 12 40	7 16	5 9	morn.	morn.	morn.	
27	27	Fr	12 12 53	7 15	5 11	0 42	0 42	0 42	
28	28	Sa	12 13 5	7 14	5 12	1 46	1 46	1 46	
29	29	S	12 13 16	7 13	5 13	2 47	2 47	2 47	
30	30	M	12 13 27	7 13	5 14	3 43	3 43	3 43	
31	31	Tu	12 13 36	7 12	5 16	4 33	4 33	4 33	
			12 13 45	7 11	5 17	5 16	5 16	5 16	



FEBRUARY

Year Day.	Month Day.	Week Day.	Noon Mark. — Wash'ton M. Time.	Sun Rises.	Sun Sets.	Moon Sets.	Moon's Phases.
32	1	W	H. M. S.	H. M.	H. M.	H. M.	
33	2	Th	12 13 53	7 10	5 18	5 55	
34	3	Fr	12 14 0	7 9	5 19	6 28	
35	4	Sa	12 14 6	7 8	5 21	rises.	F.
			12 14 12	7 7	5 22	7 4	
36	5	S	12 14 16	7 6	5 23	8 2	
37	6	M	12 14 20	7 5	5 24	8 59	
38	7	Tu	12 14 23	7 3	5 25	9 58	
39	8	W	12 14 25	7 2	5 27	10 57	
40	9	Th	12 14 27	7 1	5 28	11 58	
41	10	Fr	12 14 27	7 0	5 29	morn.	
42	11	Sa	12 14 28	6 50	5 30	1 0	3 Q
43	12	S	12 14 27	6 57	5 32	2 1	
44	13	M	12 14 25	6 56	5 33	3 0	
45	14	Tu	12 14 23	6 55	5 34	3 55	
46	15	W	12 14 20	6 54	5 35	4 45	
47	16	Th	12 14 16	6 52	5 36	5 29	
48	17	Fr	12 14 12	6 51	5 38	sets.	N.
49	18	Sa	12 14 7	6 49	5 39	6 45	
50	19	S	12 14 1	6 48	5 40	8 1	
51	20	M	12 13 54	6 47	5 41	9 14	
52	21	Tu	12 13 47	6 45	5 42	10 26	
53	22	W	12 13 40	6 44	5 43	11 34	
54	23	Th	12 13 31	6 42	5 45	morn.	
55	24	Fr	12 13 22	6 41	5 46	0 38	1 Q
56	25	Sa	12 13 13	6 39	5 47	1 37	
57	26	S	12 13 2	6 38	5 48	2 29	
58	27	M	12 12 52	6 36	5 49	3 15	
59	28	Tu	12 12 40	6 35	5 50	3 55	



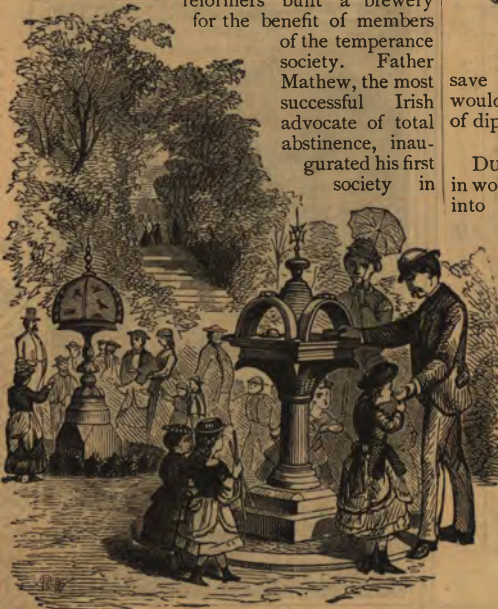


Drinking Fountain, Prospect Park.

WATER DRINKING.

IN Massachusetts and Connecticut laws to restrain intemperance were passed as early as 1639. About 1760 the churches began to object to the use of liquors at funerals. A temperance society was inaugurated at Litchfield, Conn., in 1789, the members pledging themselves "not to use any distilled liquor in doing their farm work the ensuing season." The Methodist Church in America has from the first taken strong ground against the sale and use of intoxicating beverages. Total abstinence was advocated as early as 1820, but was not adopted as a necessary condition by temperance societies until many years later. Many of the earlier advocates of temperance encouraged the culture of the grape and the use of wine as a preventive of intemperance. In Boston the early

reformers built a brewery for the benefit of members of the temperance society. Father Mathew, the most successful Irish advocate of total abstinence, inaugurated his first society in



Drinking Fountain, Central Park.

1838, and in two years it had a membership of 1,800,000. In three years — from 1838 to 1841 — the consumption of whiskey in Ireland fell from 12,500,000 to 6,500,000 gallons. In 1843, five years from the inauguration of this wonderful moral revolution, 5,000,000 persons in the United Kingdom were enrolled and pledged to total abstinence. In this year Father Mathew visited London, and, in person, administered his pledge to about 70,000 persons within six weeks.

In our modern political economy nothing except the air we breathe is so free as water. Every community invests liberally to secure the largest and purest possible supply of this prime necessary, and even prudent precaution to prevent useless waste meets with no favor at the hands of the taxpayers themselves. If pure water is a great blessing, on the other hand nothing is more liable to contamination, and when tainted it becomes a most effective agent of disease and death. The greatest care should be taken that no slops or surface drainage be allowed to pollute the drinking water. A very little care on this point would



The Spring, Central Park.

save a world of pain, and many family circles would be unbroken who now have sad memories of diphtheria and typhoid.

DURING 1880 about 322,000 gallons of brandy in wood and 46,000 cases in bottles were imported into the United States, against about 263,000 gallons and 32,000 cases in 1879. Of champagne, about 215,000 cases were imported in 1880, as against about 160,000 cases during the preceding year. There was, however, a slight falling off in the importation of clarets.

The milk of our 13,000,000 cows, at 12 cents a gallon, is worth \$695,670,000 a year.

TO KEEP ICE IN A SICK ROOM.—Cut a circle of muslin large enough to cover the top of a tumbler, and extend an inch over its sides, like the paper cover to a preserve jar. Tie this securely round the tumbler with a bit of cord or string. Lay the ice upon the top of the muslin, even if it is a large lump and stands up quite high. Do not cover it at all; its evaporation will keep it cold.



THE OLD OAKEN BUCKET.—J. S. Davis.



MARCH

THE PLOW of the ancient Egyptians was of wood, a single crooked stick forming the tail, divided for handles, and, extending below the beam, was pointed or possibly shod with bronze or iron. Metal for plowshares are referred to in the Bible (Isa. ii., 4; MICAH iv., 3), more than seven hundred years before the birth of Christ. It is surprising how the general shape of this implement has always been the same in all ages, and in all parts of the world. In 1797 a cast-iron plow was patented by Charles Newbold, of New Jersey. The first plow moved by steam power, which was practically and successfully used, was patented in England, in the year 1832, by Mr. Heathcote, M. P. It is claimed that there are now more than one thousand steam plows in use in England. The great plow used at Garden City, Long Island (Alexander T. Stewart's estate), was built in England, but afterwards modified and adapted here; it turns three furrows, each fourteen inches wide.

Year Day.	Month Day.	Week Day.	Noon Mark. — Wash'ton M. Time.	Sun Rises.	Sun Sets.	Moon Sets.	Moon's Phases.
60	1	W	H. M. S.	H. M.	H. M.	H. M.	
61	2	Th	12 12 28	6 33	5 52	4 29	
62	3	Fr	12 12 16	6 32	5 53	5 0	
63	4	Sa	12 12 3	6 30	5 54	5 28	
			12 11 50	6 29	5 55	rises.	F.
64	5	S	12 11 36	6 27	5 56	6 53	
65	6	M	12 11 22	6 26	5 57	7 51	
66	7	Tu	12 11 7	6 24	5 58	8 51	
67	8	W	12 10 52	6 22	5 59	9 51	
68	9	Th	12 10 37	6 21	6 0	10 51	
69	10	Fr	12 10 21	6 19	6 1	11 52	
70	11	Sa	12 10 5	6 18	6 3	morn.	
71	12	S	12 9 49	6 16	6 4	0 50	3 Q.
72	13	M	12 9 32	6 14	6 5	1 45	
73	14	Tu	12 9 15	6 13	6 6	2 36	
74	15	W	12 8 58	6 11	6 7	3 20	
75	16	Th	12 8 41	6 9	6 8	4 0	
76	17	Fr	12 8 23	6 8	6 9	4 37	
77	18	Sa	12 8 6	6 6	6 10	5 12	
78	19	S	12 7 48	6 4	6 11	sets.	N.
79	20	M	12 7 30	6 3	6 12	8 1	
80	21	Tu	12 7 12	6 1	6 13	9 13	
81	22	W	12 6 54	5 59	6 14	10 21	
82	23	Th	12 6 36	5 58	6 15	11 24	
83	24	Fr	12 6 17	5 56	6 16	morn.	
84	25	Sa	12 5 59	5 54	6 17	0 21	
85	26	S	12 5 40	5 53	6 19	1 10	1 Q.
86	27	M	12 5 22	5 51	6 20	1 53	
87	28	Tu	12 5 4	5 49	6 21	2 30	
88	29	W	12 4 45	5 48	6 22	3 2	
89	30	Th	12 4 27	5 46	6 23	3 31	
90	31	Fr	12 4 8	5 45	6 24	3 58	



APRIL

Year Day.	Month Day.	Week Day.	Noon Mark. — Wash'ton M. Time.	Sun Rises.	Sun Sets.	Moon Sets.	Moon's Phases.
91	1	Sa	H. M. S. 12 3 50	H. M. 5 43	H. M. 6 25	H. M. 4 24	
92	2	S	12 3 32	5 41	6 26	4 50	F.
93	3	M	12 3 14	5 40	6 27	rises.	
94	4	Tu	12 2 56	5 38	6 28	7 44	
95	5	W	12 2 39	5 36	6 29	8 45	
96	6	Th	12 2 21	5 35	6 30	9 46	
97	7	Fr	12 2 4	5 33	6 31	10 44	
98	8	Sa	12 1 47	5 32	6 32	11 40	
99	9	S	12 1 30	5 30	6 33	morn.	
100	10	M	12 1 14	5 28	6 34	0 31	3 Q.
101	11	Tu	12 0 57	5 27	6 35	1 16	
102	12	W	12 0 42	5 25	6 36	1 57	
103	13	Th	12 0 26	5 24	6 37	2 34	
104	14	Fr	12 0 11	5 22	6 38	3 8	
105	15	Sa	11 59 56	5 21	6 39	3 42	
106	16	S	11 59 41	5 19	6 40	4 15	N.
107	17	M	11 59 27	5 18	6 41	sets.	
108	18	Tu	11 59 14	5 16	6 43	7 58	
109	19	W	11 59 0	5 15	6 44	9 5	
110	20	Th	11 58 48	5 13	6 45	10 6	
111	21	Fr	11 58 36	5 12	6 46	11 0	
112	22	Sa	11 58 23	5 10	6 47	11 46	
113	23	S	11 58 11	5 9	6 48	morn.	
114	24	M	11 58 0	5 7	6 49	0 25	1 Q.
115	25	Tu	11 57 50	5 6	6 50	1 1	
116	26	W	11 57 39	5 5	6 51	1 31	
117	27	Th	11 57 30	5 3	6 52	1 59	
118	28	Fr	11 57 20	5 2	6 53	2 26	
119	29	Sa	11 57 12	5 1	6 54	2 52	
120	30	S	11 57 3	4 59	6 55	3 19	

SHEEP came into Northern Europe long after the goat, and we do not hear of their crossing the Rhine or the upper Danube until about the time of the fall of the Roman empire, though they had been known to Southern Europe. In old times they were valued chiefly for the skins and milk, the last being abundant, agreeable, and very nutritive. Now sheep are raised chiefly for the wool, flesh and fat. A well-managed flock fertilizes the country wherever they go, the manure being richer than any other except fowl. The number of sheep in the United States is now very close to the total of population.

PROF. E. W. HILGARD, of the University of California, recommends the cultivation of pyrethrum as affording an insect destroyer as efficacious as Paris green, and perfectly harmless. He also shows the importance of having the powdered pyrethrum fresh, as the volatile oil by which the insects are destroyed is soon oxidized or evaporated by exposure to the air.



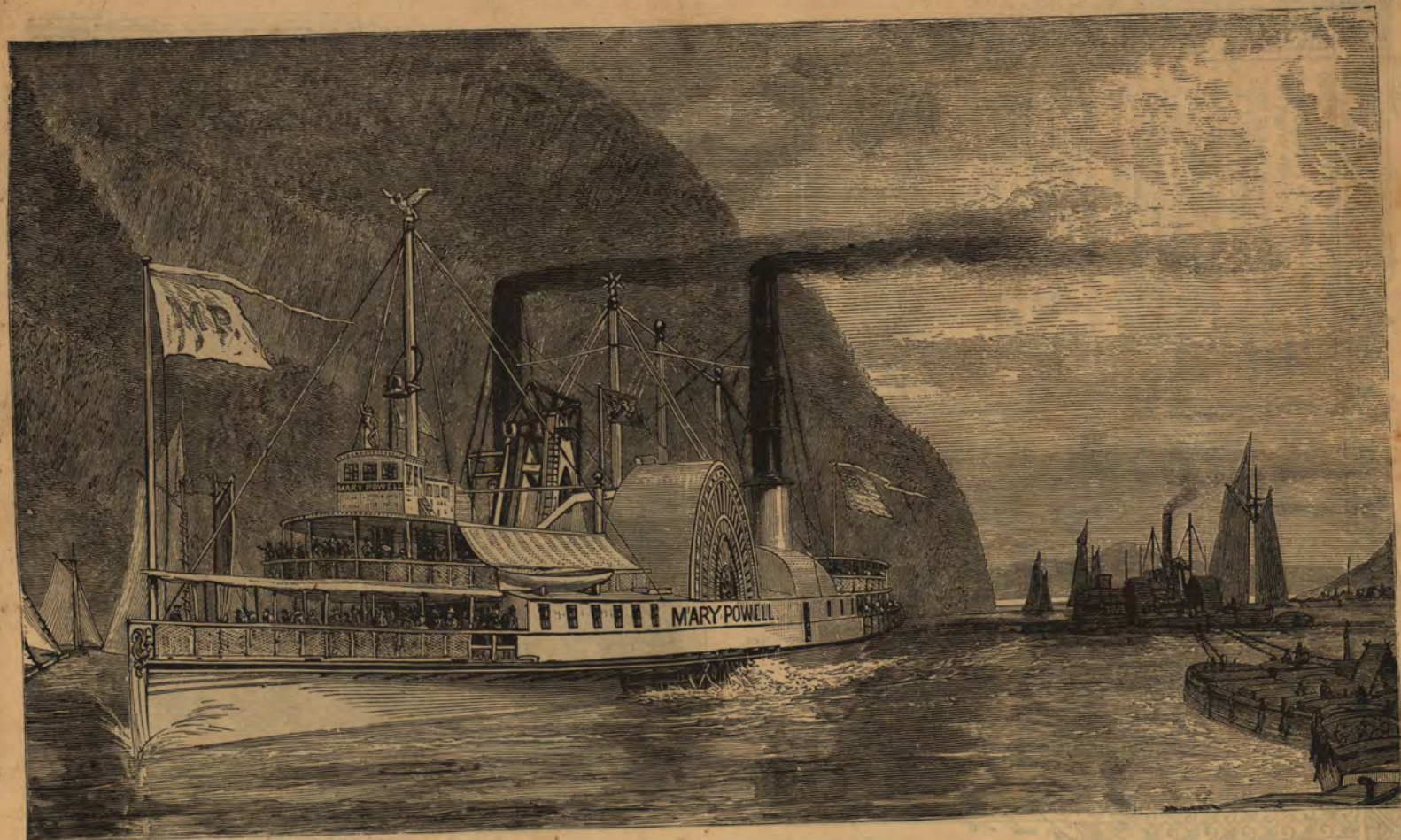
WEST POINT—THE REVIEW.

THERE may be a more lovely spot than West Point in this beautiful world, but its locality would be difficult to discover. Many contemptuous things have been said of the graduates of West Point, but it must be acknowledged that great mental and physical strength must belong to the man who passes the opening and closing examinations of the course; and by actual statistics it is shown that most of the victories of the late civil war were achieved by troops commanded by officers educated here. The daily routine is

somewhat varied at the closing of the academical year. The morning is devoted to the examinations; after dinner there is an infantry, cavalry, or artillery drill, closed by the usual dress parade. The summer uniform of gray coat and white linen pants, shows to good advantage on the grassy plain. Our artist represents the troops as they appeared when reviewed by General Grant. After various maneuvers to show the rapidity and precision with which they could change position on the field, they tried their skill in loading



THE PARADE GROUND, LOOKING NORTH.



APPROACHING WEST POINT. — A. R. Waud.



MAY

and firing their muskets, as shown in the lower picture on preceding page. This also gives a view of the Highlands of the Hudson with Newburgh Bay in the distance.

Our Dead.

How sleep the brave, who sink to rest,
By all their country's wishes blest !
When Spring, with dewy fingers cold,
Returns to deck their hallowed mould,
She there shall dress a sweeter sod
Than Fancy's feet have ever trod.

By fairy hands their knell is rung ;
By forms unseen their dirge is sung ;
There Honor comes, a pilgrim gray,
To bless the turf that wraps their clay ;
And Freedom shall awhile repair
To dwell, a weeping hermit there !

A FRENCH doctor reports black coffee in doses of two or three tablespoonfuls every two hours, alternating with wine, as a successful method of curing typhoid fever.

Year Day.	Month Day.	Week Day.	Noon Mark. — Wash'ton M. Time.	Sun Rises.	Sun Sets.	Moon Sets.	Moon's Phases.
121	1	M	H. M. S.	H. M.	H. M.	H. M.	
122	2	Tu	11 56 56	4 58	6 56	3 47	
123	3	W	11 56 49	4 57	6 57	4 19	
124	4	Th	11 56 42	4 56	6 58	rises.	F.
125	5	Fr	11 56 36	4 54	6 59	8 38	
126	6	Sa	11 56 30	4 53	7 0	9 35	
			11 56 25	4 52	7 1	10 28	
127	7	S	11 56 21	4 51	7 2	11 15	
128	8	M	11 56 17	4 50	7 3	11 57	
129	9	Tu	11 56 14	4 48	7 3	morn.	
130	10	W	11 56 12	4 47	7 5	0 34	3 Q.
131	11	Th	11 56 10	4 46	7 6	1 9	
132	12	Fr	11 56 8	4 45	7 7	1 41	
133	13	Sa	11 56 7	4 44	7 8	2 14	
134	14	S	11 56 7	4 43	7 9	2 48	
135	15	M	11 56 8	4 42	7 10	3 24	
136	16	Tu	11 56 9	4 41	7 11	4 4	
137	17	W	11 56 10	4 41	7 12	sets.	N.
138	18	Th	11 56 12	4 40	7 13	8 47	
139	19	Fr	11 56 15	4 39	7 14	9 38	
140	20	Sa	11 56 18	4 38	7 15	10 30	
141	21	S	11 56 22	4 37	7 16	10 59	
142	22	M	11 56 26	4 36	7 17	11 31	
143	23	Tu	11 56 30	4 36	7 17	morn.	
144	24	W	11 56 36	4 35	7 18	0 1	1 Q.
145	25	Th	11 56 42	4 34	7 19	0 27	
146	26	Fr	11 56 48	4 34	7 20	0 54	
147	27	Sa	11 56 54	4 33	7 21	1 30	
148	28	S	11 57 1	4 33	7 22	1 47	
149	29	M	11 57 9	4 32	7 22	2 17	
150	30	Tu	11 57 17	4 32	7 23	2 51	
151	31	W	11 57 25	4 31	7 24	3 31	



JUNE

Year Day.	Month Day.	Week Day.	Noon Mark.		Sun Rises.	Sun Sets.	Moon Rises.	Moon's Phases.
			Wash'ton M. Time.					
			H.	M. S.	H. M.	H. M.	H. M.	F.
152	1	Th	11	57 34	4 31	7 25	rises.	
153	2	Fr	11	57 43	4 30	7 25	8 22	
154	3	Sa	11	57 53	4 30	7 26	9 12	
155	4	S	11	58 3	4 30	7 27	9 56	
156	5	M	11	58 13	4 29	7 28	10 36	
157	6	Tu	11	58 24	4 29	7 28	11 11	
158	7	W	11	58 35	4 29	7 29	11 44	
159	8	Th	11	58 46	4 29	7 29	morn.	3 Q
160	9	Fr	11	58 58	4 28	7 30	0 16	
161	10	Sa	11	59 10	4 28	7 30	0 49	
162	11	S	11	59 22	4 28	7 31	1 23	
163	12	M	11	59 34	4 28	7 31	2 1	
164	13	Tu	11	59 47	4 28	7 32	2 43	
165	14	W	11	59 59	4 28	7 32	3 30	
166	15	Th	12	0 12	4 28	7 33	sets.	N.
167	16	Fr	12	0 25	4 28	7 33	8 16	
168	17	Sa	12	0 38	4 28	7 33	8 56	
169	18	S	12	0 51	4 28	7 34	9 30	
170	19	M	12	1 4	4 28	7 34	10 1	
171	20	Tu	12	1 17	4 28	7 34	10 29	
172	21	W	12	1 30	4 29	7 34	10 55	
173	22	Th	12	1 43	4 29	7 35	11 21	
174	23	Fr	12	1 56	4 29	7 35	11 48	1 Q
175	24	Sa	12	2 9	4 30	7 35	morn.	
176	25	S	12	2 22	4 30	7 35	0 16	
177	26	M	12	2 34	4 30	7 35	0 48	
178	27	Tu	12	2 47	4 31	7 35	1 25	
179	28	W	12	2 59	4 31	7 35	2 7	
180	29	Th	12	3 11	4 32	7 35	2 57	
181	30	Fr	12	3 23	4 32	7 35	3 55	

Not a breath broke the deep repose,
As calmly through the mist arose,
The pale moon.

It rose, and shed its silvery ray
With soft power, and the dying day
Felt it soon.

CANE SUGAR was first cultivated in the United States in the year 1751, near the site of New Orleans, by Jesuits from San Domingo. In 1758 the first sugar mill was built a little further down the river. Maple sugar is said to have originated in New England about 1752.

ANY citizen, or applicant for citizenship, over twenty-one years of age, may enter one-quarter section (that is, 160 acres) of any unappropriated public lands, which are subject to pre-emption at \$1.25 per acre; or he may enter by pre-emption eighty acres of such unappropriated lands, valued and classed at \$2.50 per acre by the government,



LITTLE SUNSHINE.—Miss Edwards.

THE YOSEMITE VALLEY

is situated in Mariposa County California, about 155 miles southeast of San Francisco, and is reached from Merced and other points on the Central Pacific Railroad. The Merced River flows through the valley, which is widely celebrated for the grandeur and magnificence of its scenery. It is nearly level, about six miles long by one-half to one mile wide, and is nearly a mile in perpendicular depth below the general level of the surrounding country. Its elevation above the sea is 3,950 feet. Its granite walls are nearly vertical. There are several hotels for the accommodation of tourists. Among the principal objects of interest proceeding up the valley are the following: The Bridal Vail Fall, a leap of 630

feet, with cascades below to make a total of 900 feet; Cathedral Rock, a stupendous pile of sculptured granite 2,660 feet high, above which are the spires, isolated columns of granite at least 500 feet high; Sentinel Rock, a slender mass of granite, 3,043 feet high; this rock is seen towering above the hotel in the engraving opposite. Back of Sentinel Rock is Sentinel Dome, 4,150 feet, which commands a fine view of Yosemite Fall; Virgin Tears Falls, 1,000 feet; El Capitan, an immense block of granite, presenting an almost vertical edge 3,300 feet high; the Yosemite Fall, 2,600 feet; Half Dome, an apparently inaccessible crest of granite, is one of the most imposing objects, 4,737 feet high; the Vernal Fall, 400 feet, and the Nevada Fall, 600 feet.



HUTCHINGS' HOTEL, YOSEMITE. — J. S. Davis.



JULY

EIGHT thousand two hundred and eleven newspapers and magazines published in the United States and Canada, whose circulation is given, emit an aggregate per single issue of 20,677,538 copies. The average circulation of each journal is 2,041, against an average circulation of 7,602 of each British publication, thus showing that the average American journal has but 27 per cent. of the circulation of the average British. The aggregate of all issues for one year from the 8,211 American presses mentioned is 1,836,473,592 copies, against 1,734,841,956 copies issued by the 2,928 British presses. Thus it will be seen that our foreign cousins, with but little more than one-third the number of American publications whose circulation is known, send out within one-eighteenth as many copies per annum as ours. This to the general reader may at first seem incredible, when we consider that the population of the entire United Kingdom does not exceed 35,000,000, while that of the United States and Canada varies but little from 54,000,000.

Year Day.	Month Day.	Week Day.	Noon Mark, — Wash'ton M. Time.	Sun Rises.	Sun Sets.	Moon Rises.	Moon's Phases.
182	1	Sa	H. M. S.	H. M.	H. M.	H. M.	F.
183	2	S	12 3 46	4 33	7 35	8 34	
184	3	M	12 3 57	4 34	7 35	9 12	
185	4	Tu	12 4 7	4 34	7 34	9 46	
186	5	W	12 4 18	4 35	7 34	10 19	
187	6	Th	12 4 28	4 35	7 34	10 52	
188	7	Fr	12 4 38	4 36	7 33	11 26	3 Q.
189	8	Sa	12 4 47	4 37	7 33	morn.	
190	9	S	12 4 56	4 37	7 33	0 2	
191	10	M	12 5 5	4 38	7 32	0 42	
192	11	Tu	12 5 13	4 39	7 32	1 27	
193	12	W	12 5 21	4 39	7 31	2 17	
194	13	Th	12 5 28	4 40	7 31	3 11	
195	14	Fr	12 5 35	4 41	7 30	4 9	
196	15	Sa	12 5 42	4 42	7 30	sets.	N.
197	16	S	12 5 47	4 42	7 29	8 2	
198	17	M	12 5 53	4 43	7 28	8 31	
199	18	Tu	12 5 58	4 44	7 28	8 58	
200	19	W	12 6 2	4 45	7 27	9 25	
201	20	Th	12 6 6	4 46	7 26	9 51	
202	21	Fr	12 6 9	4 47	7 26	10 18	
203	22	Sa	12 6 11	4 48	7 25	10 48	
204	23	S	12 6 13	4 48	7 24	11 21	1 Q.
205	24	M	12 6 15	4 49	7 23	11 59	
206	25	Tu	12 6 15	4 50	7 22	morn.	
207	26	W	12 6 16	4 51	7 21	0 45	
208	27	Th	12 6 15	4 52	7 20	1 38	
209	28	Fr	12 6 14	4 53	7 19	2 39	
210	29	Sa	12 6 12	4 54	7 19	3 47	
211	30	S	12 6 10	4 55	7 18	rises.	F.
212	31	M	12 6 7	4 56	7 16	7 44	



AUGUST

Year Day.	Month Day	Week Day.	Noon Mark. — Wash'ton M. Time.	Sun Rises.	Sun Sets.	Moon Rises.	Moon's Phases.
			H. M. S.	H. M.	H. M.	H. M.	
213	1	Tu	12 6 4	4 57	7 15	8 19	
214	2	W	12 6 0	4 58	7 14	8 53	
215	3	Th	12 5 55	4 59	7 13	9 28	
216	4	Fr	12 5 50	5 0	7 12	10 4	
217	5	Sa	12 5 44	5 1	7 11	10 43	3 Q.
218	6	S	12 5 38	5 2	7 10	11 27	
219	7	M	12 5 31	5 3	7 8	morn.	
220	8	Tu	12 5 23	5 3	7 7	0 15	
221	9	W	12 5 15	5 4	7 6	1 7	
222	10	Th	12 5 6	5 6	7 5	2 3	
223	11	Fr	12 4 57	5 7	7 3	3 1	
224	12	Sa	12 4 47	5 7	7 2	3 59	
225	13	S	12 4 37	5 8	7 1	sets.	N.
226	14	M	12 4 26	5 9	6 59	7 2	
227	15	Tu	12 4 15	5 10	6 58	7 29	
228	16	W	12 4 3	5 11	6 57	7 55	
229	17	Th	12 3 50	5 12	6 55	8 22	
230	18	Fr	12 3 37	5 13	6 54	8 50	
231	19	Sa	12 3 24	5 14	6 52	9 22	
232	20	S	12 3 10	5 15	6 51	9 57	
233	21	M	12 2 55	5 16	6 49	10 39	1 Q.
234	22	Tu	12 2 40	5 17	6 48	11 27	
235	23	W	12 2 25	5 18	6 46	morn.	
236	24	Th	12 2 9	5 19	6 45	0 22	
237	25	Fr	12 1 53	5 20	6 43	1 25	
238	26	Sa	12 1 36	5 21	6 42	2 34	
239	27	S	12 1 19	5 22	6 40	3 47	
240	28	M	12 1 1	5 23	6 39	rises.	F.
241	29	Tu	12 0 43	5 24	6 37	6 49	
242	30	W	12 0 25	5 25	6 35	7 25	
243	31	Th	12 0 7	5 26	6 34	8 3	

LONGFELLOW'S HOUSE, Cambridge, illustrated above, was built by John Vassall in 1735. In 1775 the builder was a fugitive tory, and Washington had made it his headquarters. Edward Everett and Jared Sparks lived here before Longfellow. Benjamin Franklin, Talleyrand, and all the notable generals of the revolution are on the list of its early visitors. Longfellow was at first a lodger, having the eastern half of the beautiful second story. Next he gained the whole of the eastern half, and at last the whole place became his by purchase. Since then the story of the old house is a story of rare beauty. It tells of the poet living in a world of his own creation for the accomplishment of his work of charity and love. It tells, too, of a generous hospitality, of genial gatherings around a liberal board, in hours consecrated to wit and noble thought. Few of the eminent literary men of this generation have visited Boston without crossing that threshold.



LONG ISLAND.

NEW YORK CITY is favored by nature beyond any rival in the world. Within easy distance for her citizens are all the great features of natural scenery—river, mountain and sea. The last is the great fountain of health, which will make New York the healthiest city of the world. Long Island, with its 200 miles of coast, is destined to be one grand suburban retreat, not alone for New York, but for the entire country. The south side is flat and sandy throughout its length, but with many lovely spots of the highest rural beauty, and most inimitable reaches of sandy beach washed directly by the Atlantic.

The Great South Bay, which extends from Fire Island Inlet to beyond East Hampton, is forty miles in length, and varies from one-half to three miles in width. On its northern shore are located the favorite resorts of Babylon, Bay-side, Patchogue, Bellport, Moriches, and the Hamptons, all largely patronized by summer sojourners. It is divided from the ocean by a narrow strip of sand, against which the Atlantic

hurls its majestic waves. The facilities for sailing on the bay are unsurpassed, protected as it is from the fierce winds outside, and the lovers of piscatorial pursuits find in its waters fish of various kinds in abundance, more especially the celebrated and toothsome bluefish in all his chameleon-like beauty.

From Coney Island to far Montauk, nowhere in the world can be found such magnificent surf with so little danger from currents and undertow. The country on the north side is high and rolling, with bold outlines on the Sound. At the extreme eastern end, between the flukes of the fish tail, lies Shelter Island, one of the most popular watering places in the country. The charms of Peconic Bay, Greenport, Orient and Old Sag Harbor have long been known, but of late years are attracting a vastly increased number of visitors, owing to the improved facilities of travel, both by rail and water. A moonlight sail along the high bluffs of the north shore and through the intricate channels to Peconic Bay is an experience that will long dwell pleasantly in the memory.



MANHATTAN BEACH. — Schell — Hogan.



■RINGING IN THE HAY.—J. S. Davis.



SEPTEMBER

FROM Rowlesburg, on the Cheat River, 253 miles west of Baltimore, one sees the railway (Balt. & Ohio) winding up westward along the mountain side, and contrasting strongly, in its suggestion of the high civilization necessary to its construction, with the savage grandeur of the scenery; but one only realizes the difficulty attendant upon building this part of the road when one begins to move, evenly and smoothly, it is true, but ever daringly upward on a bed, now a shelf cut from the mountain side in the solid rock, then crossing from one mountain buttress to another by a massive wall or strong and graceful metal viaduct, the mountains around rising higher and crowding closer as we go on; and the view at each turn seeming more sublime than the one before, until, crossing Buckhorn Wall, 90 feet high, with its pretty cascade, one finds an opening to the left, while the river, 500 feet directly below, turns abruptly north. The view from this point, illustrated above, is, perhaps, the finest on the whole road.

Year Day.	Month Day.	Week Day.	Noon Mark. — Wash'ton M. Time.	Sun Rises.	Sun Sets.	Moon Rises.	Moon's Phases.
244	1	Fr	H. M. S. 11 59 48	H. M. 5 27	H. M. 6 32	H. M. 8 41	
245	2	Sa	11 59 29	5 28	6 31	9 25	
246	3	S	11 59 10	5 29	6 29	10 12	
247	4	M	11 58 50	5 30	6 27	11 4	3 Q
248	5	Tu	11 58 30	5 31	6 26	11 59	
249	6	W	11 58 10	5 32	6 24	morn.	
250	7	Th	11 57 50	5 33	6 22	0 56	
251	8	Fr	11 57 30	5 34	6 21	1 54	
252	9	Sa	11 57 9	5 35	6 19	2 53	
253	10	S	11 56 49	5 36	6 17	3 50	
254	11	M	11 56 28	5 37	6 16	4 48	
255	12	Tu	11 56 7	5 38	6 14	sets.	N.
256	13	W	11 55 46	5 39	6 12	6 26	
257	14	Th	11 55 25	5 40	6 11	6 54	
258	15	Fr	11 55 4	5 41	6 9	7 24	
259	16	Sa	11 54 43	5 42	6 7	7 59	
260	17	S	11 54 22	5 43	6 6	8 38	
261	18	M	11 54 1	5 44	6 4	9 22	
262	19	Tu	11 53 39	5 45	6 2	10 13	
263	20	W	11 53 18	5 46	6 1	11 11	1 Q
264	21	Th	11 52 57	5 47	5 59	0 15	
265	22	Fr	11 52 36	5 48	5 57	0 48	
266	23	Sa	11 52 15	5 49	5 56	1 23	
267	24	S	11 51 55	5 50	5 54	2 36	
268	25	M	11 51 34	5 51	5 52	3 50	
269	26	Tu	11 51 14	5 52	5 51	5 5	
270	27	W	11 50 53	5 53	5 49	rises.	F.
271	28	Th	11 50 33	5 54	5 47	6 34	
272	29	Fr	11 50 14	5 55	5 45	7 17	
273	30	Sa	11 49 54	5 56	5 44	8 4	



OCTOBER

Year Day.	Month Day.	Week Day	Noon Mark. — Wash'ton M. Time.	Sun Rises.	Sun Sets.	Moon Rises.	Moon's Phases.
274	1	S	H. M. S.	H. M.	H. M.	H. M.	3 Q.
275	2	M	11 49 35	5 57	5 42	8 56	
276	3	Tu	11 49 16	5 58	5 41	9 51	
277	4	W	11 48 57	5 59	5 39	10 49	
278	5	Th	11 48 39	6 0	5 37	11 48	+
279	6	Fr	11 48 21	6 1	5 36	morn.	
280	7	Sa	11 48 4	6 2	5 34	0 46	
			11 47 47	6 3	5 32	1 45	
281	8	S	11 47 30	6 4	5 31	2 42	N.
282	9	M	11 47 14	6 5	5 29	3 39	
283	10	Tu	11 46 58	6 6	5 28	4 36	
284	11	W	11 46 48	6 7	5 26	5 33	
285	12	Th	11 46 28	6 8	5 24	sets.	1 Q.
286	13	Fr	11 46 14	6 10	5 23	6 1	
287	14	Sa	11 46 0	6 11	5 21	6 28	
288	15	S	11 45 47	6 12	5 20	7 21	F.
289	16	M	11 45 34	6 13	5 18	8 10	
290	17	Tu	11 45 22	6 14	5 17	9 5	
291	18	W	11 45 11	6 15	5 15	10 5	
292	19	Th	11 45 0	6 16	5 14	11 10	1 Q.
293	20	Fr	11 44 50	6 17	5 12	morn.	
294	21	Sa	11 44 40	6 18	5 11	0 18	
295	22	S	11 44 31	6 20	5 10	1 28	F.
296	23	M	11 44 23	6 21	5 8	2 40	
297	24	Tu	11 44 15	6 22	5 7	3 53	
298	25	W	11 44 9	6 23	5 5	5 7	
299	26	Th	11 44 2	6 24	5 4	rises.	F.
300	27	Fr	11 43 57	6 25	5 3	5 52	
301	28	Sa	11 43 52	6 26	5 1	6 43	
302	29	S	11 43 48	6 28	5 0	7 38	F.
303	30	M	11 43 45	6 29	4 59	8 37	
304	31	Tu	11 43 43	6 30	4 58	9 37	

THE above cut represents a view on the Potomac, 126 miles west of Baltimore, about $1\frac{1}{2}$ miles east of "Sir John's Run." Sir John's Run is named from Sir John Sinclair, Braddock's quartermaster; near here James Rumsey, a protégé of Washington, launched his steamboat in 1784, and two miles distant are Berkeley Springs, a favorite resort of the Washingtons and the Fairfaxes, and still a popular summer resort and delightful watering-place. Near Sir John's a rich vein of hematite ore has lately been opened, and, judging from the yield thus far, will largely add to the iron resources of the country.

A REMARKABLE glacier is described by a gentleman who traversed the mountains about Leadville. It is located in the Mosquito range, and seems to have all the characteristics of the Switzerland glaciers. It is about one mile in length, and gives rise to a stream of water during the warmer months. Being out of the route of ordinary travel, he thinks it is not likely to be visited except by hunters.



AN ADIRONDACK STREAM.—Homer D. Martin.

THE great number of lakes and streams, easily navigable to the light canoe of the Indian, with occasional portages past the rapids and falls, gave to the Adirondack Wilderness, in former times, features of great interest. The deer, moose, caribon, bear, beaver and otter were abundant, and with the numerous varieties of fish, of those excellent qualities only met with in our northern waters, gave to that ancient race nearly all they required. The game, excepting the caribon, still linger. The hemlock is peculiarly the hunter's tree; the bark forms his shelter, with the boughs and twigs for a couch, on which his weary

limbs may repose without fear of colds or rheumatic aches, while the broad chips are plates to receive the savory viands boiled upon its burning wood. The white pine is the most valuable product of the region, which, as may be inferred, offers little inducement to the farmer. Here was the paradise of the old-style woodsman, Cooper's Leatherstocking, now fast disappearing before the intrusion and contaminating influences of fashionable touring, for whose accommodation the Delaware and Hudson Canal Company have extended their railroad, and many excellent hotels and boarding houses have recently been built.





NOVEMBER

Never Too Late to Learn.

Cato, at eighty years of age, began to study the Greek language. Socrates, at an extreme old age, learned to play on musical instruments. Plutarch, when between seventy and eighty, began to learn Latin. Doctor Johnson applied himself to the Dutch language but a few years before his death. Ludovico Mondesco, at the great age of one hundred and fifteen years, wrote the memoirs of his own times. Ogilby, the translator of Homer and Virgil, was unacquainted with Latin and Greek till he was past fifty. Franklin did not commence his philosophical studies till he had reached his fiftieth year. Dryden, in his sixty-eighth year, commenced the translation of the *Æneid*, his most pleasing production. Boccaccio was thirty years when he commenced his studies in light literature; yet he became one of the greatest masters of the Tuscan dialect, Dante and Petrarch being the other two. Many similar oases might be cited.

Year Day.	Month Day.	Week Day.	Noon Mark. — Wash'ton M. Time.	Sun Rises.	Sun Sets.	Moon Rises.	Moon's Phases.
305	1	W	H. M. S. 11 43 41	6 31	4 56	H. M. S. 10 37	3 Q.
306	2	Th	11 43 40	6 32	4 55	11 36	
307	3	Fr	11 43 41	6 33	4 54	morn.	
308	4	Sa	11 43 41	6 35	4 53	0 34	
309	5	S	11 43 43	6 36	4 52	1 31	N.
310	6	M	11 43 46	6 37	4 51	2 28	
311	7	Tu	11 43 49	6 38	4 50	3 25	
312	8	W	11 43 54	6 39	4 49	4 22	
313	9	Th	11 43 59	6 41	4 48	5 20	1 Q.
314	10	Fr	11 44 5	6 42	4 47	sets.	
315	11	Sa	11 44 12	6 43	4 46	5 19	
316	12	S	11 44 20	6 44	4 45	6 7	F.
317	13	M	11 44 28	6 45	4 44	7 0	
318	14	Tu	11 44 38	6 46	4 43	7 59	
319	15	W	11 44 48	6 48	4 42	9 2	
320	16	Th	11 44 59	6 49	4 41	10 8	3 Q.
321	17	Fr	11 45 11	6 50	4 41	11 16	
322	18	Sa	11 45 24	6 51	4 40	morn.	
323	19	S	11 45 37	6 52	4 39	0 25	
324	20	M	11 45 51	6 53	4 39	1 35	N.
325	21	Tu	11 46 6	6 55	4 38	2 46	
326	22	W	11 46 22	6 56	4 37	3 58	
327	23	Th	11 46 39	6 57	4 37	5 9	
328	24	Fr	11 46 56	6 58	4 36	rises.	1 Q.
329	25	Sa	11 47 15	6 59	4 36	5 21	
330	26	S	11 47 34	7 0	4 35	6 19	
331	27	M	11 47 53	7 1	4 35	7 20	
332	28	Tu	11 48 14	7 2	4 34	8 22	3 Q.
333	29	W	11 48 35	7 3	4 34	9 23	
334	30	Th	11 48 56	7 4	4 34	10 22	

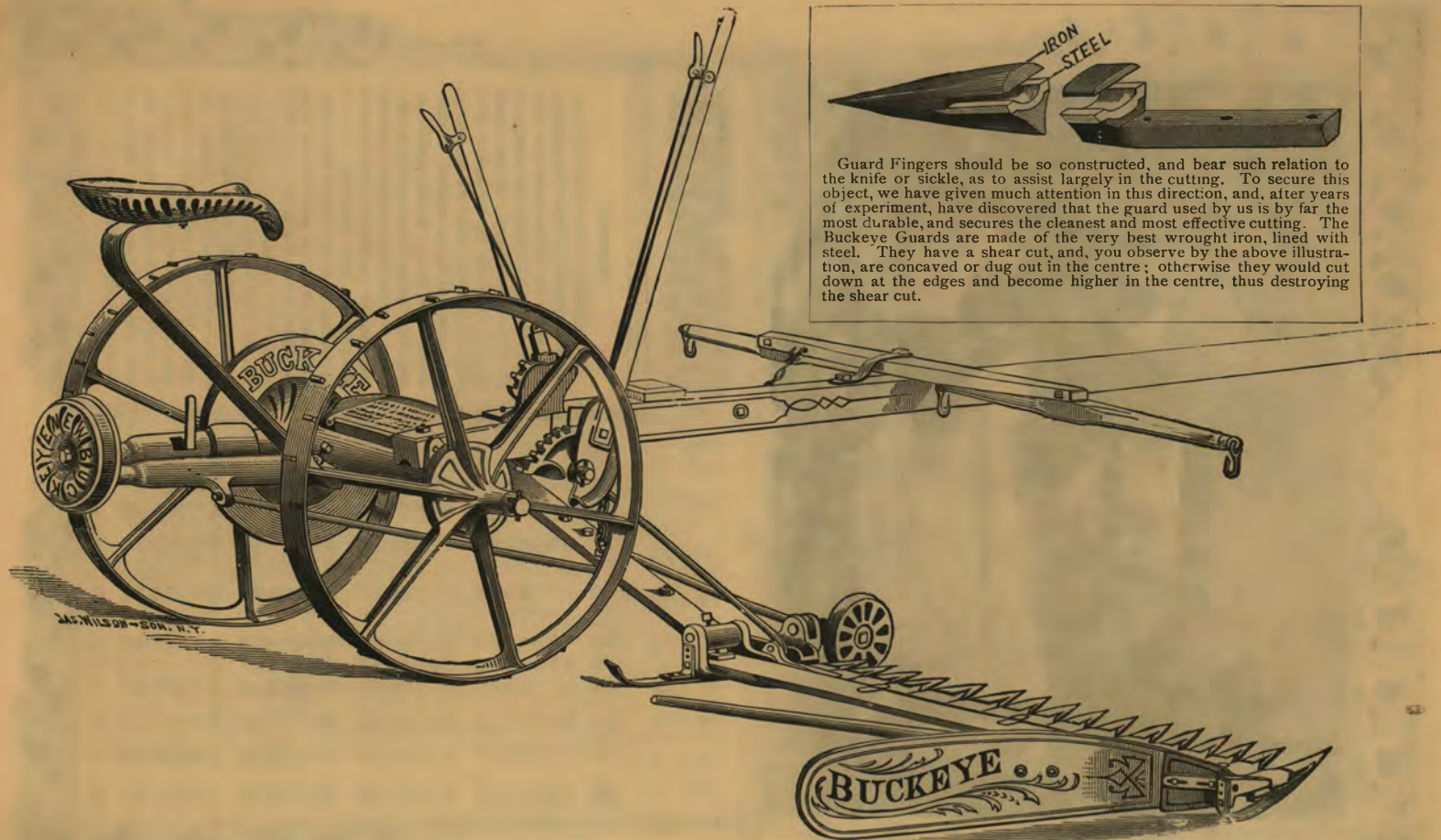


DECEMBER

Year Day.	Month Day.	Week Day.	Noon Mark.	Wash'ton M. Time.	Sun R'ses.	Sun Sets.	Moon Rises.	Moon's Phases.
			H. M. S.		H. M.	H. M.	H. M.	
335	1	Fr	11 49 19		7 6	4 34	11 20	
336	2	Sa	11 49 42		7 7	4 33	morn. 3 Q.	
337	3	S	11 50 6		7 7	4 33	0 17	
338	4	M	11 50 30		7 8	4 33	1 14	
339	5	Tu	11 50 55		7 9	4 33	2 12	
340	6	W	11 51 21		7 10	4 33	3 9	
341	7	Th	11 51 47		7 11	4 33	4 8	
342	8	Fr	11 52 13		7 12	4 33	5 7	
343	9	Sa	11 52 40		7 13	4 33	6 6	
344	10	S	11 53 8		7 13	4 33	sets.	N.
345	11	M	11 53 35		7 14	4 34	5 50	
346	12	Tu	11 54 4		7 14	4 34	6 53	
347	13	W	11 54 32		7 15	4 34	8 0	
348	14	Th	11 55 1		7 16	4 34	9 8	
349	15	Fr	11 55 30		7 17	4 34	10 17	
350	16	Sa	11 55 59		7 18	4 34	11 26	
351	17	S	11 56 29		7 19	4 34	morn. 1 Q.	
352	18	M	11 56 58		7 19	4 35	0 35	
353	19	Tu	11 57 28		7 20	4 35	1 45	
354	20	W	11 57 58		7 21	4 36	2 54	
355	21	Th	11 58 28		7 21	4 36	4 3	
356	22	Fr	11 58 58		7 22	4 37	5 9	
357	23	Sa	11 59 28		7 22	4 37	6 9	
358	24	S	11 59 57		7 22	4 38	rises.	F.
359	25	M	12 0 27		7 23	4 39	8 14	
360	26	Tu	12 0 57		7 23	4 39	8 52	
361	27	W	12 1 26		7 24	4 40	9 25	
362	28	Th	12 1 56		7 24	4 41	9 55	
363	29	Fr	12 2 25		7 24	4 41	10 23	
364	30	Sa	12 2 54		7 24	4 42	10 50	
365	31	S	12 3 23		7 24	4 43	11 17	

Christmas.

THE institution of the Christmas festival is attributed to Pope Telesphorus, who died A. D. 138, and from that time it has always been one of the most poded of Christian solemnities. At first it was the most movable of the festive days, often confounded with the Epiphany, and celebrated by the eastern churches in April and May. In the fourth century Pope Julius I. ordered an investigation as to the day of Christ's nativity. The result of the inquiry by the theologians of the East and West was an agreement upon the 25th of December. The chlef grounds of this decision were the tables of the censors in the archives of Rome; and, although all the fathers did not consider that the proofs were authentic or sufficient, the day was uniformly accepted, and from that time the nativity has been celebrated by christendom (except by the Greek Church) on the same day. It has also been a common tradition that Christ was born about the middle of the night.

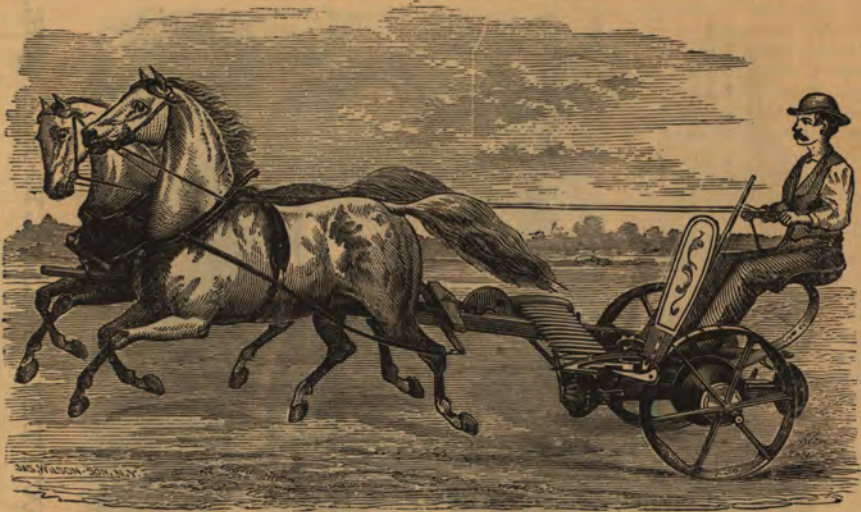


Guard Fingers should be so constructed, and bear such relation to the knife or sickle, as to assist largely in the cutting. To secure this object, we have given much attention in this direction, and, after years of experiment, have discovered that the guard used by us is by far the most durable, and secures the cleanest and most effective cutting. The Buckeye Guards are made of the very best wrought iron, lined with steel. They have a shear cut, and, you observe by the above illustration, are concaved or dug out in the centre; otherwise they would cut down at the edges and become higher in the centre, thus destroying the shear cut.

JAS. WILSON & SON, N. Y.



THE BUCKEYE MOWER.



THE BUCKEYE ON THE ROAD.

The cutter-bar of the Buckeye is in front of the drive wheels. This position insures the lightest draft, as has been demonstrated at all important trials. The balance can be made perfect whatever the driver's weight may be. Side draft and pressure on the horses' necks are entirely obviated. The bar being in front, all its operations are easily observed without turning one's head away from the horses.

But no consideration requires the cutters to be in front so imperatively as the safety of the driver himself. Drivers are often thrown from the seat of the machine by accident, and the list of mutilations and terrible deaths from this cause has grown to a frightful length. None of these have happened to those using the Buckeye, for the driver must necessarily fall behind the cutters, in a place of safety.

Simplicity and Strength.—The frame of the Buckeye is tubular, being cast in one piece, and is firmly braced with wrought iron. Bolts are almost entirely dispensed with. It combines all the strength of wrought iron with the rigidity of cast iron. Supported by such a frame, machinery runs easier and lasts very much longer than upon a frame composed of bars and bolts.

The Excellent Mechanism of the Buckeye is strikingly illustrated in the Buckeye gearing. The first, or slow motion, is obtained by a bevel gear; and the second, or fast motion, by a straight or spur gear. Only four cog-wheels are required, and these are carried high off the ground. All are encased and obviate the danger of accidents, several of which, of the most painful character, have occurred during the past year, in some cases resulting in the death of the drivers of machines having exposed gearings in the drive-wheels.

The Double-Jointed Coupling Bar—that invaluable and imperishable invention—was first given to the world by the Buckeye. The use of this coupling permits the cutter-bar to hug the ground, cutting closely and evenly over knolls and ridges, as well as through ditches and furrows.

When not at work the bar can be folded over the tongue, in front of the driver, making the Buckeye the most portable machine in existence.

Cold-Rolled Iron is used in making our cutter bars. It costs more than steel, and is stronger and stiffer. In fact, it is the only material from which a perfect mower-bar can be made.

Pitman and Crank.—The high speed required of the pitman demands that the greatest possible degree of directness, steadiness and uniformity should be given to its movements. In all these respects the Buckeye pitman, made of the best steel, possesses extraordinary merit. The crank-wheel and double-hinged bar always move in unison, so that the throw of the knife through the guards is never varied by the rise and fall of the cutter-bar.

The box at the crank end is not in the pitman, but in the crank-wheel. With this arrangement no amount of wear can cause any loss of motion or knocking, because the pressure which forces the knife in both directions comes, all the time, against the same part of the box.

The Tilting Lever—attached at the rear of the tongue, on the main frame—is very easily handled by the operator, who by this means raises and lowers the points of the guards without cramping the pitman and knife, or throwing any of the points out of line.

The Lifting Lever—a powerful one—is located at the side of the frame. With it the operator can raise the cutters over obstructions with remarkable ease.

The Leading Wheel on the inside shoe, and a spring sole on the outer shoe, regulate the height of cutting to suit the work in hand. The danger of clogging is entirely obviated, and the cut grass is left in the best possible shape for drying.

The Grace and Beauty of the Buckeye can be inferred from our engravings, but to be fully appreciated it should be seen. The fame of the machine is world wide, and the demand for it extends to all countries where grain and grass cutting machines are used.



THE NEW MOWER, COMBINED WITH TABLE-RAKE.

THE BUCKEYE TABLE-RAKE REAPER.

The general form of the Table-Rake may be learned from our illustrations. After looking at these the reader need not be told that this is the simplest form of side-delivery reaper in the market. The cutter-bar is in front—an arrangement that has saved scores of lives, judging by the very frequent occurrence of accidents and death to those using rear-cut reapers.

The Buckeye being a front-cut machine, the platform is supported both in front and behind the main frame and drive-wheel. The switch, or grain-wheel, is in line with the drive-wheels, which is a very great advantage in turning. There is another advantage in the fact that the driver has his work immediately at his side, and in plain view, and does not have to look to the rear, as with the rear-cutting reapers.

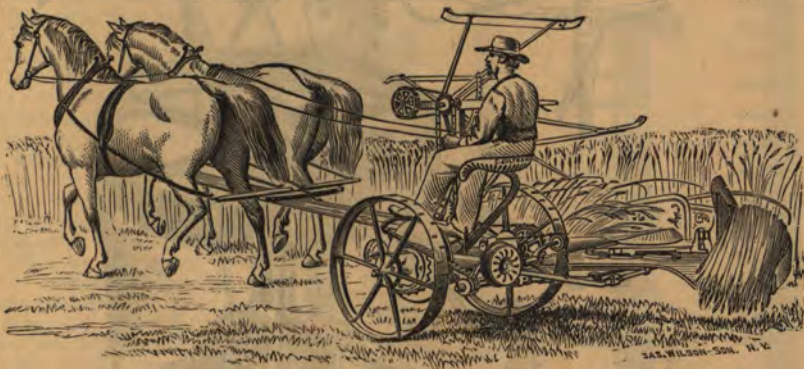
It allows the use of the overhanging reel, just as it is found on the dropper—a great advantage over reel-rakes, as it is easily and instantly adjusted by the driver for all kinds of grain. The rake itself requires no adjustment for the different conditions of grain. It discharges the gavels in much better condition for the binders than any other reaper. Four men will bind easier and better after the Table-Rake than five men after the old-fashioned, revolving paddle rakes. A most striking proof of this fact was the verdict of the binders at the Centennial Field Trial, Philadelphia, 1876, rendered in the following words: "We, the undersigned, bound after all the Self-Rake Reapers exhibited and operated at the Centennial Field Trial, held on the farm of the Neshamany Park Association, and unhesi-

tatingly pronounce the Buckeye Table-Rake Reaper as the easiest machine to bind after, it leaving the grain in such even condition and so compressed that it is as easy to bind three sheaves after the Buckeye Table-Rake Reaper as two sheaves made by any other self-rake machine." This document was signed by all the binders, without exception. And such is the verdict of every unprejudiced farmer.

The Table Rake has also many other points of superiority: The rake may be stopped at any moment, and the sheaf carried as far as desired; this is impossible on the reel-rake. The reel is driven by sprocket wheels and chain instead of the old-fashioned reel chain. In raising and lowering the bar, both ends are raised and lowered alike, while other rakes raise or lower one end of the bar twice as much as the other end. The reel is speeded independently of the rest of the machine. The height of cutting is changed without stopping. There is no side draft, and the balance of the machine is perfect. It has no superior, and we do not believe it is equaled in capacity to save tangled grain.

C. AULTMAN & Co. are the original inventors and patentees of the Table-Rake, as they are of the Buckeye Mower. They will keep the construction of the Table-Rake up to the standard that has made its splendid reputation; but they decline responsibility for the performance of other machines that are appearing from time to time under the name of "Table-Rake," with a view to profit largely upon the reputation earned by their machine.

THE BUCKEYE SINGLE REAPER.

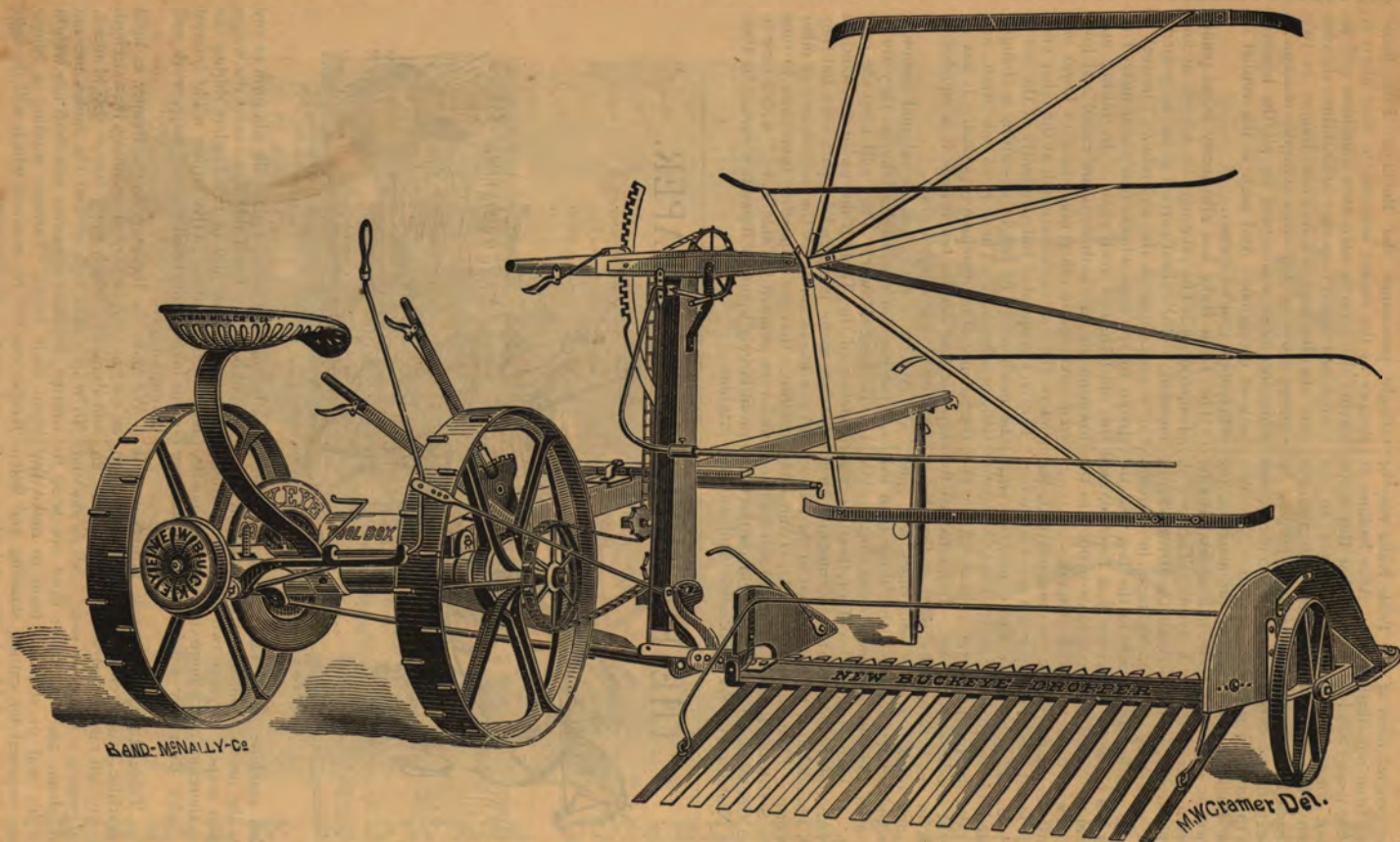


This machine most fully and satisfactorily meets the needs of farmers who prefer an independent reaper. It is a two-wheeled machine, and is therefore much more convenient to handle, and safer than any single-wheeled machine can be.

The Table-Rake attachment, furnished with this machine, has given more perfect satisfaction than any self-raking reaper yet produced. In down grain it is without a peer. All is cut and saved clean, and the driver does not need to leave his seat or stop his team to make any change required for cutting standing and fallen grain in the same field. Levers at both ends of

the bar make it easy to place the platform at any desired height. The Table-Rake saves the wages of one and generally of two binders during the harvest, thus saving to the farmer a big interest on his investment, besides doing better work and lasting longer.

We make the Buckeye Single Reaper as light as we can, and be sure of retaining that strength and durability which every farmer should exact. No reaper runs lighter, and the horses are not worried, for there is neither side draft nor weight upon their necks. Farmers wanting a Single Reaper can find no machine which will do their work equal to the BUCKEYE.



THE BUCKEYE DROPPER.

THE BUCKEYE DROPPER.

THE BUCKEYE DROPPER deposits the sheaf in the rear of the machine. The bundles are easily sized by the driver by means of a foot lever. The cutter-bar being in front, the driver's safety is assured. This brings the slatted platform right under the driver's eye, thus sparing him the straining and tiresome effort required in constantly looking back to ascertain the size of his gavel while his eye should in fact be in front looking out for obstructions.

The machine may be set at any height that will suit the crop. The reel may be raised or lowered, and the points of the guards may be raised or lowered instantly and without stopping

the machine, to cut either standing or tangled grain. The motion communicated to the reel by a sprocket chain is uniform and reliable. A cut-off rod which moves into the space made by one of the reel wings holds the sheaf until ready to be delivered, and prevents the scattering of grain. The draft is very light and the balance perfect.

With farmers who do not raise very large crops the BUCKEYE DROPPER is justly a great favorite, because it is the simplest form of reaper; it is easiest to handle; its work is equal to the best, and it is the least expensive.

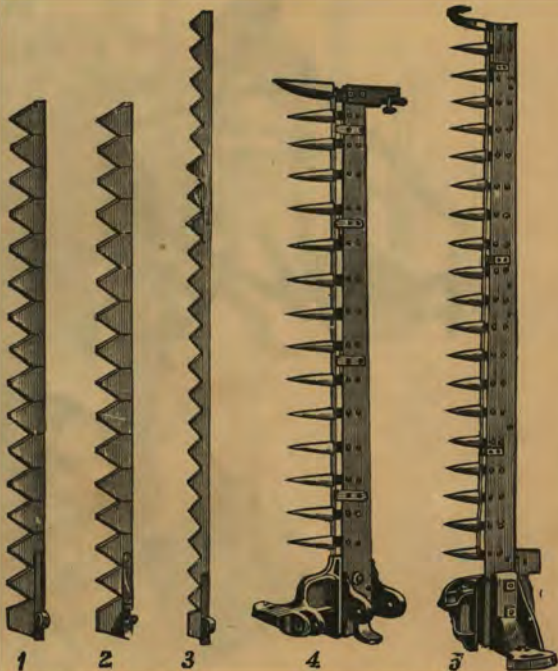
OUR COMBINED MACHINES.

In all the ups and downs of the machine business the Buckeye Combined Reaper and Mower has ever gained a wider and wider sphere of usefulness. Each machine is built as a mower, but is so made that a self-raking attachment or dropping attachment can be added in a few minutes. These attachments can be set to work automatically, and they are under the control of the driver as completely as the mower itself.

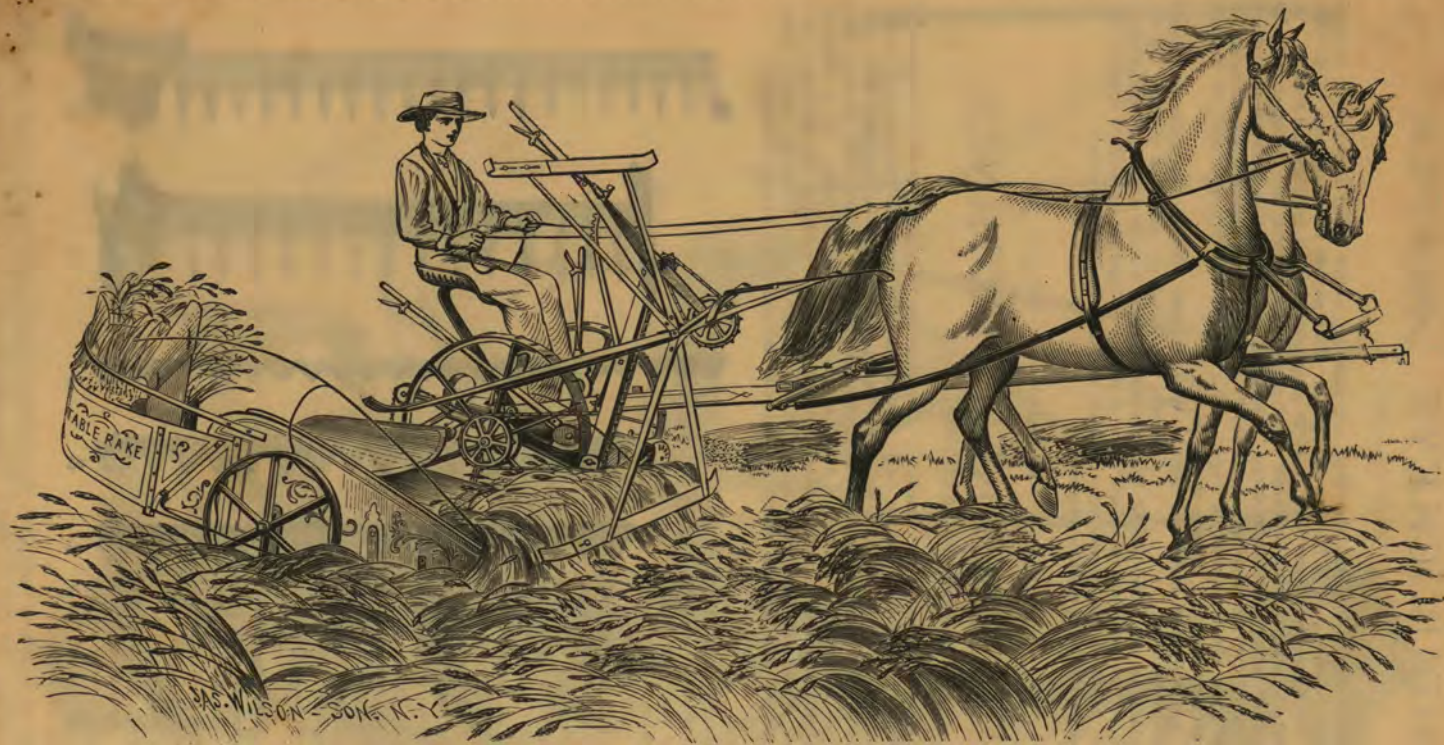
Some manufacturers furnish with their so-called combined machines, only two knives and one finger-bar, subjecting them to the double duty of mowing and reaping. It is a well-known fact that the cutting apparatus, while it is the most costly part of the machine to make, is the first to wear out. The gearing or power, if used with ordinary care, will outlast, at the least, two complete sets of cutting apparatus. Is it not then evident that the farmer who buys a so-called combined machine with only one finger-bar, which he puts to the double work of mowing and reaping, will be compelled after a time to go to the expense of a new cutting apparatus, which he must pay for at the price usually charged for repairs?

A greater width of cut is also desirable in reaping than is possible in mowing, and this can only be had by the use of two finger-bars. Do not allow yourself to be deceived in this important item. *Do not pay the price of a combined machine and be turned off with only one finger-bar; a great saving indeed to the manufacturer, but a still greater loss to the farmer.*

We print the following cuts for the purpose of showing, at a glance, the completeness of the cutting apparatus which is furnished with each Combined Buckeye Reaper and Mower, viz.: Nos. 1 and 2, Mowing Knives; No. 3, Reaping Sickle; No. 4, Finger-Bar for Mowing; and No. 5, Finger-Bar for Reaping, besides extra sections and guard, with rivets for repairs.



FLAX KNIVES IN PLACE OF SICKLES.—Farmers who desire the smooth-edged knife for cutting flax, instead of a sickle, with their BUCKEYE Reaper, should say so when ordering machines.



THE BUCKEYE TABLE-RAKE REAPER IN DOWN AND TANGLED GRAIN.

We unhesitatingly claim for the Table-Rake that in lodged and tangled grain it does better and cleaner work than any other Reaper that we know of. In no single particular has the Table-Rake made such fast friends, as in its ability to save tangled crops in the best possible shape. The farmers say: "We never had worse grain to cut, and never saw better work in lodged grain." "The tilting lever, to throw the

points of the guards down, is just the thing to take up lodged grain." "My grain was all down flat, but the Table-Rake went right along and took it up clean." "I cut in down grain, and took it up so clean that you could not tell where the grain had been down." We confidently assert, as the universal opinion of those who have used our Reaper, that no machine equals the Table-Rake in laid crops.

SAFETY FOR THE DRIVER.



Let the above caution and our statement in regard to the greater safety of the **BUCKEYE** be dismissed too lightly, we append below brief references to some accidents that have only recently come to our knowledge:

Aug. 26, 1881, a son of Adam Schliesman, 13 years of age, living some ten miles north of Carroll, Iowa, while cutting flax with a rear-cut Champion reaper, was thrown from the seat in front of the knives. The rake caught him and drew him back upon the guards. The lifeless body was found impaled on the guards and cut nearly in twain from the breast down. The team moved only a few yards after the boy fell.

In August, 1881, Michael Jordon, a few miles north of Cedar Falls, Iowa, borrowed his brother's Champion rear-cut machine and put his fourteen-year-old boy on to drive. The outside wheel ran over a stone and the boy was thrown in front of the knives, cutting off one finger and mangling others. Mr. Jordon says they made him believe there was no danger in a rear-cut machine, but it can never be talked into him again.

Sept. 12, 1881, John Phillips' son, aged 14, living in Superior Township, Williams Co., O., was driving a rear-cut Champion when the seat broke, dropping him in front of the knife, which cut off his right arm.

Aug. 11, 1881, near Iola, Kansas, a son of James Townsend, while cutting grass on a rough piece of prairie with a rear-cut Champion, was thrown from the seat in front of the knives and badly cut and wounded in many places by the knives and guards. Some of the gashes were six or seven inches long. He lost one finger and is likely to lose one toe.

Mr. R. B. Estep, of Fairport, Mo., says, "No more rear-cut in his." His mules ran away with him while driving his Champion mower. He was thrown from the seat, and would have fallen in front of the knives and been crippled for life had he not caught on the lever.

Frank Brakel, a twelve-year-old son of Wm. Brakel, living near Silver Lake, Mich., July 13, 1881, coaxed his father to let him drive his rear-cut Champion mower. He had gone but a few rods when the horses stirred up a Lees'-nest and ran, throwing Frank in front of the knives. The cutter-bar passed over him so that he escaped with his life, but one of the guards cut an ugly gash on his head.

Edward Hedrick, Esq., living some miles south of Noble, Richland Co., Ill., was the unfortunate owner of a rear-cut Champion. One day in July, 1881, he allowed his wife to take his place on the machine while he shocked up the oats already cut. After going several rounds she fell from the seat in front of the knives, which nearly

severed the right hand at the wrist, and cut and bruised her limbs and body in several places. It is thought that she was overcome by the excessive heat and fainted.

Near Danville, Ky., Aug. 6, 1881, Joe Faulconer's son was thrown off a Champion rear-cut mower, and his arm so badly lacerated that it had to be amputated.

At Thomasboro, Champaign Co., Ill., Henry Seesdorf was reaping with a Champion, when one wheel fell in a hole. To save himself from falling before the sickle he caught hold of the wheel, his hand passing under the pinion so that he lost two fingers. Thinks he got off pretty well.

Near Hirambsburgh, Noble Co., July 14, 1881, John Bruner was thrown off a Champion rear-cut mower and his hand cut off at the wrist. The surgeons were compelled to amputate again above the wrist.

Near Bangor, Wis., July 18, the wife of Fritz Trader was driving a Champion reaper while her husband was eating his lunch. She was knocked off the seat by one of the rakes and killed instantly.

At Ramsay, Ill., while driving a Champion mower, a son of Sol C. Morrison was thrown from the seat and fortunately fell into a dead furrow. Only one heel and one hand were torn up and considerably crippled. But for his falling in the furrow he would have been killed.

Near Oregon City, Oregon, a man named Fairman was driving a rear-cut reaper when his horses took fright and ran away, throwing him in front of the sickle. Both legs were cut off and he died almost immediately.

At White Oak Valley, Brown Co., O., Homer Wills fell from a rear-cut Ohio mower. He fell right in front of the guards, and would have been killed had not his horses stopped. One guard had already entered the back of his hand, one into his arm and one into his leg, all of which left ugly scars.

Near Warren, Ill., while running a rear-cut Kirby reaper, C. C. Vandyke was thrown in front of the sickle, tearing off his left leg, severing his arm and crushing his skull, killing him outright.

Near Sparta, O., while mowing with a rear-cut Champion, Wm. Jackson somehow lost his balance and fell in front of the cutters. His left arm was torn off near the shoulder, and his right arm so nearly severed that only the best attention and surgical skill saved it.

EXTRAORDINARY COMPETITIVE HONORS

HAVE STRIKINGLY DISTINGUISHED THE CAREER OF THE BUCKEYE

from the very date of its introduction to the world, under the auspices of the UNITED STATES AGRICULTURAL SOCIETY, at Syracuse, N. Y., in 1857.

Upon that occasion,

For the First Time in the World,

was exhibited a machine with two drive-wheels, a flexible cutter-bar, in front, and folding over the tongue, and other Buckeye characteristics. The First Prize there awarded was

The Most Important Event Known in the History of Agricultural Machinery,

because the new principles there first exhibited by the Buckeye popularized Harvesting Machines—a result that never could have been attained by means of the clumsy, single-wheel, stiff-bar machines that preceded it; and it was followed by a radical change of methods by all manufacturers in their efforts to make machines like the Buckeye. At

Every Great Field Trial in the United States the Buckeye has carried off all the Highest Honors.

While this fact can be stated with a well-justified feeling of pride, it can also be added that, in respect to honors conferred in foreign countries, the Buckeye has been placed in the first rank. At the

Vienna, Philadelphia, and Paris World's Fairs,

the Buckeye received the highest prizes awarded to machines of its class. Only during the past three years it has been classed first at hundreds of field trials in Europe, bearing off, among other trophies,

The Royal Gold Medal of the Spanish Society of Agriculture, at Madrid,

King Alfonso himself being present and taking a great interest in the trial; also,

The Gold Medal awarded by the State Agricultural College of Bucharest, Roumania;

The Gold Medal of the French Society of Agriculture—Trial near Paris;

AND

TWENTY-ONE GOLD MEDALS and FIRST PRIZES

offered by State Authorities and Associations, all of the first and most important class, and energetically contended for by the leading machines, American and European. Also, a

Much Larger Array of Silver and Bronze Medals,

each of which signalizes a First Prize and an honorable victory on a competitive field of more or less importance. Indeed, the record of the Buckeye in this field consists of

AN UNBROKEN SERIES OF BRILLIANT SUCCESSES,

such as cannot be equaled, or even approached, by any machine in existence.

C. AULTMAN & CO.,

—MAKERS OF

BUCKEYE HARVESTING MACHINERY.

Office and Manufactory - - - CANTON, OHIO, U. S. A.

OFFICERS:

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President.

HENRY C. FOGLE,
Secretary and Treasurer.

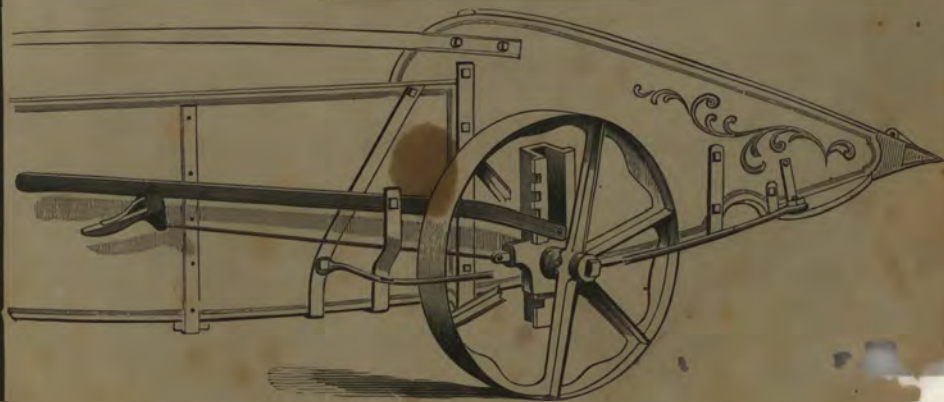
JACOB MILLER,
Superintendent.

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NOTE—Letters of inquiry for prices of our different machines and terms of sale, and applications for agencies and the address of agents, should be addressed to our office nearest to your place of residence, or to the home office, at Canton, Ohio. *All inquiries will receive prompt and careful attention.*



The above cut shows the lever for raising and lowering the outer end of the Table Rake Platform. Taken in connection with the Lifting Lever, at inner end, it will be seen that the entire platform can be placed at any desired height with ease, and in a moment's time. The convenience of this arrangement in raising and lowering the platform will be apparent.



C. AULTMAN & CO'S WORKS AT CANTON, OHIO.