

Teachers' Department.

Sabbath School Scripture Lessons.

JULY 31st, 1859.

Read—LUKE xii. 22-40: God's Providence. The true end of life. GENESIS xlix. 1-2, 23-33: Jacob blesses his sons.

Recite—LUKE xii. 4, 5.

AUGUST 7th, 1859.

Read—LUKE xii. 41-59: The trial of the servant. GENESIS I: The death and mourning for Jacob.

Recite—LUKE xii. 32-34.

MESSENGER ALMANAC.

From July 24th to August 6th, 1859.

		SUN.		MOON.		High Water at	
D.M.	Day	Rises.	Sets.	Rises.	Sets.	Halifax.	Windsor.
24	SU.	4 37	7 23	11 49	2 12	1 26	6 44
25	M.	4 38	7 22	morn.	3 27	2 17	7 40
26	Tu.	4 39	7 21	0 37	4 41	3 28	8 41
27	W.	4 40	7 20	1 40	5 46	4 47	9 45
28	Th.	4 41	7 19	2 54	6 42	5 5	10 50
29	F.	4 42	7 18	4 16	7 26	7 10	11 52
30	Sa.	4 43	7 17	5 43	7 57	8 6	aft. 51
31	SU.	4 44	7 16	7 4	8 25	8 56	1 45
1	M.	4 45	7 15	8 23	8 49	9 43	2 36
2	Tu.	4 46	7 14	9 41	9 9	10 27	3 25
3	W.	4 47	7 13	10 57	9 31	11 9	4 14
4	Th.	4 48	7 12	A.	9 55	11 51	5 2
5	F.	4 49	7 11	1 21	10 23	0 13	5 52
6	Sa.	4 51	7 9	2 29	10 57	0 55	6 43

* For the time of HIGH WATER at Pictou, Pugwash, Wallace, and Yarmouth add 2 hours to the time at Halifax.

* For HIGH WATER at Annapolis, Digby, &c., and at St. John, N. B., add 3 hours to the time at Halifax.

** The time of HIGH WATER at Windsor is also the time at Parrsboro', Horton, Cornwallis, Truro, &c.

*** For the LENGTH OF DAY double the time of the Sun's setting.

Making children happy.

How easy it is to make children love you! How? Just make them happy. And be sure that so long as you keep them happy and employed, they will not run into vice. Mr. R. G. Pardee, an amateur cultivator of flowers and fruits, in Thirty-fifth Street, some months ago offered to give the children of a public school each a German aster, if they would take care of it. The aster he was to raise from the seed, and give them to the children for transplanting. True to his promise, and to his love of children, on the first of June Mr. Pardee again visited that public school, and talked about flowers to the children, all of whom he invited to call at his home and receive a plant to take care of—by this act each one pledging himself to take care of it. Of the large numbers belonging to the school, Mr. Pardee did not think many would go after the aster. But at the appointed time, the children, alive with happiness, went in crowds for the promised plant, thronging Mr. Pardee's home and the walks in the street. There they waited, while Mr. Pardee for hours gave one after another, the plant which months before he had promised them. Could we envy anybody, we should envy that man the pleasure resulting from that spontaneous act of genuine kindness. By that little service Mr. Pardee has planted himself in the hearts of thousands of children; and there he will live, wreathed with flowers which would never bloom there but for this kind impulse. How many will bear the voice bidding them "Go, and do thou likewise?" How many will heed the voice? Some can lead the young ones to love and care for flowers; some can lead them to other subjects, which may profitably occupy them, and at the same time, unconsciously to the children, influence them for good. Will all, according to his gift, in like manner, act on children? It will do much to shield them from the power of sin.—*Life Illustrated.*

A Good Recommendation.

"Please, sir, don't you want a cabin boy?"
"I do want a cabin boy, my lad, but what's that to you? A little chap like you ain't fit for the berth."
"Oh, sir, I'm real strong. I can do a great deal of work, if I ain't so very old."
"But what are you here for? You don't look like a city boy. Run away from home, hey?"
"Oh no indeed, sir: my father died, and my mother is very poor, and I want to do something to help her. She let me come."
"Well, soany, where are your letters of recommendation?" Can't take any boy without these."
Here was a damper. Willie had never thought of its being necessary to have letters, from his minister, or his teachers, or some proper person to strangers that he was an honest and good boy. Now what should he do. He stood in deep thought, the captain meanwhile curiously watching the workings of his expressive face. At length he put his hand into his bosom and drew

out his little Bible, and without one word put it into the captain's hand. The captain opened the leaf and read:

"Willie Graham, presented as a reward for regular and punctual attendance at Sabbath School and for his blameless conduct there and elsewhere. From his Sunday School Teacher."

Capt. McLeod was not a pious man, but he could not consider the case before him with a heart unmoved. The little fatherless child, standing humbly before him, referring him to the testimony of his Sunday School teacher, as it was given in his little Bible, touched a tender spot in the breast of the noble seaman, and clapping Willie heartily on the shoulder, he said: "You are the boy for me; and, if you are as good a lad as I think you are, your pockets shan't be empty when you go back to your good mother."

Railroads Superseded.

The successful experiment of Messrs. Wyse and LaMountain in travelling by their arial ship from St. Louis to the Atlantic sea board is certainly one of the great evidences of the progress of the age. They ascended on the 1st Inst., and were soon driven by a hurricane at the rate of two miles per minute.

The balloon is entirely constructed of silk, is 60 feet in diameter, and has ascending power of nearly 8,000 lbs. The boat is provided with sails and spars which may be brought into service if she should descend upon lake or sea. They travelled about 1,150 miles. Professor LaMountain gives a most graphic account of the voyage, from which we make a few extracts.

"THE NIGHT.—As we passed up, the great city of St. Louis beneath seemed to be compressed and drawn together on a concave, the valleys and woods melting into each other until the outlines became almost indistinguishable; houses floating in a gutter, and emitting faint puffs of smoke. At about 8 o'clock, we could see that the people below were having their sunset, although we were in full blaze of light. The prairies looked like vast fields of polar ice, slightly tinged with green, but quite destitute of luminous properties. Between us and them hung suspended, evidently, a dark and almost opaque belt, which seemed like a veil drawn over the country. The alternate patches of cultivated grounds, water sheets, and little hills and gulches, gave to all a diversified appearance; though the hills had lost their relative cone-like appearance, and seemed to be vast sugar loaves, fretted with raisins and lemon parings—the effect of alternate forest and grass. Such a spectacle must be seen to be appreciated, and can be seen only by those who study nature from the favourable position we occupied.

Very gradually, the darkness stole up from below. It was as though invisible hands were lifting up the veil as it approached and enveloped us. In a few moments the sun left us, disappearing in a hazy luminous bank of red. It did not become dark. Throughout the night, we were able at all times to distinguish the prairies from the wooded country below, even when at an altitude of two miles. We were floating in a sort of transparent vapor, which, without possessing any perceptible body, yet seemed to be made up of luminous particles. The effect of the light was very peculiar. It gave the balloon a phosphorescent appearance, as though it were charged with fire. So powerful was this, that every line of the netting, every fold of the silk, every cord and wrinkle, were as plainly visible as if illuminated by torches; and I could at any moment tell the time by consulting my watch. This phenomenon became more striking as we increased our altitude. My theory of a fact so remarkable and before unheard of, is that the clouds charged with electrical principles, and acted upon by the heat of the sun, emitted and dispensed through the air the luminous particles, which, though separately indistinguishable, were still myriad torch bearers of our wondrous way. This theory has scientific warrant in the fact that ships have sometimes been similarly illuminated at sea, so powerfully that the mast head was visible from deck, which would proceed from the same causes, acting under different circumstances. That it is not a natural feature of height above the earth's surface, is shown by the fact that when Charles Green, Mark Mason, and Lord Holland made their famous nocturnal voyage from London to Weilburg, it was so dark it seemed as if the balloon was passing through solid blocks of black marble.

THE DAWN.—From 1 o'clock until sunrise, at about 4½ o'clock, I kept the balloon within 400 or 500 feet of the earth,—using during that time but three pounds of ballast, which I consider a little remarkable. During this period, all three of my companions were fast asleep—the atmosphere being very warm and pleasant at the altitude we maintained—and their decided snoring gave me a pleasant accompaniment in my voyage, and somewhat varied my reflections.

About 35 minutes past 1 o'clock, the balloon lowered suddenly, so as to almost touch the tops of the trees. I threw out three pounds of ballast, and heard the sand strike upon the roof top probably in Cass County. This small discharge elevated us so that we passed clear of an ugly piece of woods a short distance ahead. I called out always on passing a house, and was invariably answered by the bark or howl of a dog. At this time, daylight made its appearance, heralded by a faint glimmering in the East, quickly followed by the most beautiful auroral phenomena, and a brilliant illumination of the whole vista of the space in which we were moving. Again the

veil seemed to drop over us, hung for a short time between the balloon and the earth, and then disappeared, as if its particles had decomposed and floated away. As if by magic, all was glowing in vernal beauty around, and a splendid panorama lay spread out beneath us; the yellow fields of grain, the wooded patches, and the tortuous windings of the streams, being clearly distinguishable. The rising of the sun clothed all these in glorious robes of living sparkling light. It seemed as if every tree top bore a coronal and every field of grain was heaped with a cabinet of gems, while the surface of the waters shone with an untold magnificence. I could not refrain from exclaiming aloud in wondering admiration of the glory of nature's God. My companions, who were awake by this time, joined with me in feasting upon the ravishing splendor of the view."

New Route to Australia and New Zealand.

News came by the steamship Washington of the British Government having resolved to establish steam communication with Australia and New Zealand by way of Panama. It appears that tenders are invited for the carrying of a monthly mail to those Southern colonies by the Western route, and that steam is to be the propelling power of the vessels employed. To say nothing of the accommodation which will thus be rendered to those who travel or correspond between Britain and the Australian colonies, the projected arrangement will be of great service to many persons in this country and the American continent at large. The distance to be travelled between us and Australia or New Zealand will be only a half what it has hitherto been, and the time to be spent in the voyage will be less than one-third—while the dangerous and distressing part of the route, namely, that around Cape Horn, will be avoided. We do not know what American port is to be touched by the vessels which will perform the trip between England and the eastern side of the Isthmus; but it would be very favorable to British America if they were to call at Portland, and thus communicate with these Provinces through our railroads and telegraphs. It has been considered probable that the Great Eastern will be employed on this line; but it does not seem likely that she would go on to Aspinwall, even if she were engaged on the Atlantic passage. The auxiliary line of the Cunard Company now runs down to the South, and probably will be able to do this Eastern part of the business better than any other vessels. The Pacific portion of the route would be entirely new, and involve the greatest amount of speculation on the part of the contractors. Further information respecting the progress of the project will be looked for by many with great interest. Not only does it affect our facilities for communicating with the Australian regions, but it may be an important step in the advancement of our overland route to British Columbia and the Pacific shipping and lands.—*Toronto Colonist.*

TOBACCO is a prominent, probably, a chief cause, of the sudden deaths which happen among men. Why? Because the heart is a muscle. It is lean meat—and gets the power to beat and pulsate from the nerves. It is kept in continued action by the stimulus of the blood. When the terrible poison has worked its way into the blood, the nerves and the muscles, including, of course, the heart, begins to beat irregularly. It palpitates just as the hand trembles, and folks say they have the heart disease. After a time it stops, refuses to beat at all, and the foolish lover of tobacco dies—a victim of a useless and loathsome habit.

A ship is called *she*, says the *Cleveland Herald*, because a man knows not the expense till he gets one—because they are useless without employment—because they are upright when in stays—because they bring news from abroad, and carry out news from home.

The oldest preacher in Philadelphia is the Rev. George Chandler, who, in the course of his ministry, has married 3,116 couples, and performed funeral services over the remains of 5,000.

Rev. J. P. Cook, son of the late Rev. Dr. Cook, seems to be following in the footsteps of his father. He is traveling about in France, afoot, holding religious meetings, and organizing Sunday Schools—a zealous, faithful, and efficient man.

VALUABLE TO CLERGYMEN AND OTHERS.—Stains upon character are not easily removed, but those on black cloth may be by taking equal quantities of sulphuric ether and spirits of ammonia, applied either with a sponge or raw cotton. Gentlemen of "the black cloth" will do well to remember this, as they may thereby save the expense of a new coat.

Agriculture.

Oats Lodging.

Why do oats lodge? We have sometimes heard farmers boast that their ground was in such excellent heart that the oats would lodge, inferring therefore that the crop of oats was extraordinarily large, so large that the straw could not hold them up. We would argue that no real practical farmer ever met with this difficulty. The soil cannot be said to be in perfect heart, merely because it contains an excessive quantity of barn-yard manure. To be in heart, it should be in such exact balance that every part of the plant can appropriate what it requires to secure its strength as well as its quantity. The material which gives strength to the oat straw, is silicate of potash, silic combined with potash. Whoever knew a crop of oats to lodge when grown on soils containing a fair amount of wood ashes? Whoever knew any crop to show rust when grown on a soil fairly charged with phosphates, of potash, soda, and lime? Can a plant be in a healthy condition when the silicious coating which gives it strength is deficient in quantity? The plant cannot avail of silic simply because it is surrounded by sand. There must be some alkali present to attach the surface of the particles of the sand, and to render the silic soluble in water. With that, the capillary action of the plant may elevate this soluble silic, and deposit it in such portions as require strength. This action upon the particles of sand, at the same time frees all the other constituents which go to make up its mass to the depth of the removal of the silic, the particles becoming smaller, and being so roughened at their surfaces by the chemical action of the alkali, as to prevent their settling by rains and dews so as to be too compact. All this is assisted in degree by the decay of roots in the soil; for these yield up among other constituents, alkalies, and of so progressed a kind as to have superior chemical power in the disorganization of the pent-up inorganic materials contained in every particle of the soil. Let no practical farmer then pride himself on having his land out of condition, and thus losing his oats for want of strength in the straw.—*Working Farmer.*

To raise Potatoes.

A correspondent of the *Prairie Farmer*, states that having noticed how potatoes were interrupted in their growth, and invariably pined away and died if disturbed and braised when wet with dew or rain, he selected a patch of a potato field, the whole of which was good soil, and in good order to try an experiment. This patch he only plowed once, and then loosened the soil with the hoe when the vines were above ground, and in the heat of the day when they were perfectly dry. He never touched them afterwards until they were dug in October last year. These vines kept green throughout the season, and the yield of Potatoes was very large. The other portion of this same potato field was purposely worked three times, when the vines were wet with dew. These blighted early, did not produce half a crop, and the potatoes were of a very inferior quality. The ground, seed, and time of planting in both patches, were the same.—*Scientific American.*

Management of the Horse.

Never attempt to clean or otherwise disturb your horse while eating his meals, unless you want him to bite and kick. But when you clean, take him out of the stall, and make a business of it. Tie your horse in the centre of the stall, unless you want him to do, as most horses do, drive more on one rein than on the other. Horses that are liable to cast themselves in their stalls, should be tied with neck-halters, giving them much more freedom of the head than the nose-halter. Gentleness, firmness and moderation will subdue the most obdurate.

KIDNEY WORMS.—Swine are often troubled with a disease denominated by veterinarians, the "kidney worm." Corn, soaked in very strong lye made of wood ashes, is said to be an infallible remedy. Salt and brimstone, in small quantities, is a preventive, and, indeed, the only one known. Comfortable quarters and good food are of really more importance in the successful management of these animals than many are inclined to suppose, and should never, on any account, be neglected.

A USEFUL FACT.—In peeling onions, put a large needle in the mouth, half in and half out. The needle attracts the oily juice of the bulb, and any number may be peeled without affecting the eyes.—*Prairie Farmer.*

Somebody says the conversion of a South Sea Islander is an easy matter, compared with that of a Fifth Avenue beathen.