

New Spelling.

The new juvenile paper, "The Youngster," has the following contributions to a proposed spelling book on a new plan, never thought of either by Dillworth or Webster:

80 you be—A tub.
80 old be—A top.
Be 80—Bat.
See 80—Cat.
Poa 80—Pat.
Are 80—Rat.
See O double you—Cow.
See u be—Cub.
See a bee—Cab.
Be you double ee—Bull.
Be a double ee—Bull.
Be a double ee—Bull.

When poet learns to read this right,
He'll make a hudebrastic spire.
For the benefit of Young Authors.

A certain young poetaster,
Than whom but few could rhyme it
Was by a wag, with lengthened
Accented thus, with seeming
"Good sir, pray witness is your
In making verse with such
"First I select, for I can
Such words, by pairs, as single
Then down along the right hand
Arrange them, sir, in ample
These, I'd have you to know, are my fount
'Gainst those that criticize the
When this is done, I choose my
And look far less to sense than
My lines will then begin to
From right to left, from top to

First Lesson for Beginners in popular Orthographic Phonography.

Wright we know is written right,
When we see it written right,
But when we see it written right,
We know 'tis not then written right,
For write, to have it written right,
Must not be written right or wrong,
Nor yet should it be written right,
But write, for so 'tis written right.

Puzzle.

Oh may
Love by hearts those
United, and mingled into
Fondly so vows these keep still one
Pledged, and dream of them alone.
Ever for on shine love our may and
Like honey's undying ray, which
Misfortune's dark or grief
Ne'er hath power
Chase to
Away.

Why was Gen. Washington the oldest warrior that ever existed? Because it is generally admitted that he was "first in war," (besides being "first in peace, and first in the hearts of his countrymen.")

[And was Gen. Washington at the battle of Bunker Hill?] as a young Elder from Washington said at our conference, last fall? We were not present at the battle of Bunker Hill, and must leave the answer to history.]

PRESERVATION OF FAT AND OILS.—An article in the Western Lancet, by Dr. C. W. Wright of Cincinnati, states that the butters of Ohio, in ancient times, had a curious way of preserving their butter from becoming rancid, by melting it along with the powder or fine shreds of the bark of the slippery elm—about a drachm of the former to a pound of the latter—and then straining it. The bark communicates an odor to the fat, resembling that of the kernel of the hickory nut. Dr. Wright has subjected other fatty bodies, including butter and lard, to the same experiment, and in every instance he states with success. Butcher thus prepared, he says, was a year afterwards as sweet and free from disagreeable odor as the day it was made—a fact, if it really be a fact of no mean interest to housekeepers and others.

"I am afraid I shall come to waste," said an old lady to a young gentleman.
"I have come to want already," was the reply, "I want your daughter."

WATER GAS.—One of the English papers informs us that Dr. Miller, of Manchester, has patented a process by which a brilliant gas is produced from water. A recent preliminary trial took place in the presence of a number of scientific and other gentlemen, among whom were a number of persons interested in gas manufacture. Neither smell nor smoke are emitted from the gas manufactured by Dr. Miller, either in the manufacture or while burning. We are assured that the cost of producing this gas is merely nominal. Unlike Mr. Paine, Dr. Miller proposes at once to put his invention to some practical use, and has already made preparations for lighting Dunkeld. The process is thus explained: Hydrogen is first extracted in a retort of pure water, and carried in the form of a flame to a retort in which the carbon is formed. These two combined are then conveyed through a purifier to the gasometer.

An Irishman complained of his physician that he kept so stuffing him with drugs, that he was sick for a week after he was quite well.
How folks differ! We chew tobacco, the Hinnos take to lime, while the Patagonians find contentment in a life of gloom. The children of this country delight in candy; those of Africa in rock salt. A Frenchman "goes his length" on fried frogs, while an Esquimaux Indian thinks a stewed candle the climax of dainties. The South Sea Islanders differ from all these, their fancy dish being a broiled clergyman, while they never get hold of a grass colored umbrella without boiling it up for greens.

RELIGIOUS CUSTOM.—There is a custom that has long been prevalent throughout Peru and Chili, which to the stranger is quite imposing. It is this: at 9 o'clock in the morning, at noon, and at 6 in the evening, the great bell of the Cathedral is tolled for one minute; during this time all business is suspended; every one takes off his hat, is expected to kneel, cross himself, say his prayers, and the more devout to kiss the pavement. In the street, shop, private dwelling and hotel, all business, all motion, all conversation, is suspended, until the great bell ceases to toll; then all is life and activity again; the bugles at the palace gate, and the convent bells sound merrily, and business and conversation are resumed at the point where they were dropped.

A Greek maiden being asked what fortune she would bring her husband, replied in the following beautiful and forcible language:
"I will bring him what gold cannot purchase—a heart unspotted, and virtue without a stain, which is all that descended to me from my parents."

Late advices announce that the Great Western Canada Railroad company have issued proposals in London, for a loan of \$1,000,000 on six per cent. stock, and that about one-half of the amount required has been already taken.

A gentleman on a visit to Washington, recently, and anxious to listen to the debates, opened, very coolly, one of the doors of the Senate, and was about to pass in, when the door-keeper asked:
"Are you a privileged member?"
"What do you mean by such a man?" asked the stranger.

The reply was, "A governor, an ex-member of Congress, or a foreign minister."
The stranger replied, "I am a minister."
"From what court or country, if you please?" said the official.

(Very gravely pointing up)—"From the Court of Heaven, sir."
To this the door-keeper waggishly remarked "This government at present has no intercourse with that foreign power."

A SCENE IN COURT.—Very recently a young man was brought into court charged with theft.
"What brought you to this extremity?" demanded the judge.

"Misery."
"You wear a gold ring nevertheless."
"It belonged to my mother, whom I never recollect of seeing, and I hope it will be the means of my finding her."

The judge, believing it to be his duty, passed sentence, when a female approached the bar, and exclaimed:
"It is my son, gentlemen! I was young and poor, and was led away by a wealthy man. The judge will not deny this, for it was he, and the prisoner he has condemned is his own son!"

LECTURES ON ASTRONOMY.

BY PROF. ORSON PRATT.

LECTURE EIGHTH.

Mercury.

We shall next proceed to give a brief sketch of the primary planets of the solar system; the names of which we have given in the order of their distances from the sun, namely: Mercury, Venus, Earth, Mars, Flora, Vesta, Iris, Metis, Hebe, Astraea, Juno, Ceres, Pallas, Jupiter, Saturn, Uranus, and Neptune. Of these, the earth has already been under our investigation; and the principal phenomena exhibited in relation to its motions, the form of its orbit, the time of its revolution, &c., have been explained. And as there are many of these characteristics similarly manifested by all the rest of the planets, it will be necessary to repeat the illustrations in each individual case of these bodies.

The planet Mercury is the first in order. This planet performs a revolution around the sun at the mean distance of about 36,000,000 of miles; its period of time is about 88 days; its diameter is about 3,200 miles; its bulk is about 16 times less than our globe. This planet is supposed to be placed the nearest to the sun, yet it is possible that there may be several planetary bodies still nearer, as it would be very difficult to observe such bodies, even though we were assured of their existence; the bright glare of the sun would probably shield them from our view.

It is very likely, that if such bodies existed, we should occasionally behold them crossing, like small black dots, the sun's disc; but no such phenomena have been observed. It is also very probable that if such bodies existed, their perturbations upon the planet Mercury would be rendered visible. The gravitating force of each planet affects every other planet, more or less, according to the distance and quantity of matter in the disturbing planet. These mutual disturbances are such as to cause the planets to deviate from the true elliptic paths which they would pursue if no such disturbance existed. Now the planet Mercury does not appear to be disturbed by any planetary body within its orbit; and, therefore, from these negative evidences we have grounds to suppose Mercury to be the nearest planet to the sun.

The orbit of Mercury is enclosed within that of the earth's, being about 59,000,000 of miles from the path pursued by our globe. It follows, therefore, that the illuminated hemisphere of Mercury will assume every variety of position in relation to the earth; for Mercury is an opaque body and only shines as it is shone upon. That hemisphere which is turned towards the sun will be highly illuminated, while the opposite hemisphere will be in the dark and consequently invisible to us. Now the illuminated hemisphere will be turned from us, when Mercury is in that portion of its orbit between the sun and earth, consequently it will be invisible.

In this position the planet is said to be in its *inferior conjunction*. When the planet is in that portion of its orbit most distant from the earth, or when it is nearly on the opposite side of the sun from us, it is said to be in its *superior conjunction*; it is then that the sun illuminates the hemisphere of the planet which is turned towards the earth; and if the bright glare of the sun did not prevent us from seeing the planet, its disc would appear round and full. At all intermediate positions between the inferior and superior conjunctions, the planet will assume every phase exhibited by our moon between her conjunction and opposition; if it were possible to perceive through the telescope, the planet, when near its inferior conjunction, it would appear like a crescent, becoming more and more slender the nearer it approaches the line between the earth and sun; this crescent would have precisely the shape of the new moon. As the planet recedes from its inferior conjunction, so as to be in a line drawn from the sun at right angles to the line of vision by which we see the planet, it will then appear like a half moon, one-half of the enlightened hemisphere being visible, and the other half invisible because it is turned from us. From this point as it still recedes from us towards its superior conjunction, a greater portion of the enlightened hemisphere gradually leaves the view, exhibiting a gibbous phase, preceding the shape of the moon between the full and second and third quarters; but as it now approaches its superior conjunction, the great intensity of the sun's rays will overpower the feeble rays of reflected light from the planet, and it will be hid in the glorious splendor of day. It is therefore, only for a few days, when near its greatest eastern and western elongation, that it can be easily seen with the naked eye.

What we mean by the planet's greatest eastern and western elongation is that position in its orbit, when just one-half of the enlightened hemisphere is turned towards the earth; this happens, on an average, about six or seven times during the year, alternately on the east and then on the west of the sun. The greatest distances at which the planet is seen on the east and west of the sun, varies from 16 deg. 12 min. to 28 deg. 48 min. The principal cause of this variation is the great eccentricity of the elliptic orbit of Mercury, which is nearly one-fourth of the planet's mean distance from the sun, and as the sun is situated in one focus of the ellipse, it is evident, that when the earth is in a line at right angles to the major axis of Mercury's orbit, the elongations which happen at that time near the perihelion, will be only a little over one-half what they would be at or near the aphelion point of the orbit.

When the planet is at its greatest eastern elongation, it will be seen in the west just before sunset; when it is at its greatest western elongation, it will be seen in the morning just before sunrise. When the planet is seen with the naked eye, it exhibits a very brilliant white light, like Venus, only much smaller. The best and most favorable seasons of the year to view this planet is when its greatest elongations happen, in the months of March or April, or in August or September.

The further you recede from the orbit of Mercury the more difficult will it be to perceive this planet. It is extremely probable that the inhabitants on the most distant planets of our system have never been favored with a view of Mercury, and are, it is presumed, altogether ignorant of its existence, unless they have seen it apparently crossing the sun's disc, like a small black point; for in all other positions it would be overwhelmed in the brightness of the solar rays.

We have already observed that Mercury revolves around the sun in about 88 days; this, therefore, is the length of one year to the inhabitants of that planet; each of the four seasons will alternately take place in the short period of 22 days. During the time that Mercury performs one complete revolution around the sun, the earth performs about one-quarter of its revolution; hence if they both set out together from the inferior conjunction, that planet has to describe one complete revolution and about one-third of another, in order to bring itself again into conjunction with the sun and earth; this requires a period of about 116 days, and is called the *synodical period*. In this period happens all the phases which have been described. The real time of one complete revolution is called the *sidereal period*, and is exactly equal to 87 days, 23 hours, 15 min., 43.9 sec.

If the orbit of Mercury were in the same plane as that of the earth, at each inferior conjunction, that planet would through the telescope be observed to enter the sun's disc on the eastern limb, and pass across the same to the western limb; but when observed as a small dark spot, and requiring from five to seven hours to traverse the disc. But as the orbit of Mercury, instead of being coincident with the plane of the earth's orbit, is considerably inclined to that plane, namely, 7 deg. On 9's, the transits do not happen only at intervals of several years. The transits of Mercury that will happen during the present century, will take place as follows:

Visible,	1661, Nov. 12,	11	52 A. M.
Invisible,	1668, Nov. 4,	11	16 P. M.
Visible,	1678, May 6,	11	10 A. M.
Visible for a short time,	1681, Nov. 7,	5	12 P. M.
Visible for a short time,	1801, May 9,	7	17 P. M.
Visible,	1894, Nov. 10,	10	49 A. M.

The time of the transits here expressed is the mean civil time at Great Salt Lake City, which place we have assumed to be 7 hours and 28 minutes west of Greenwich. We have only given the

time in which they will be seen in the middle of their paths at Greenwich. They will be seen nearly in the same position on the sun's disc from this city, as from Greenwich. The few seconds deviation will be principally owing to the parallax. These transits will require the telescope to render them visible.

Owing to Mercury's dazzling appearance, it is very difficult to discover any prominent marks upon its surface, yet Schreuter, a German astronomer, has been enabled, not only to discern spots, but mountains also upon its disc. The height of two of these mountains, he has calculated, one of which is about 1 1/4 miles high; the other about 10 3/4 miles, or about 8 times higher than the twin peaks on the east of this valley. The highest mountains on Mercury are said to be situated in the southern hemisphere of that planet.

When the horns or cusps of this planet are carefully observed at the time when it appears of a crescent form, it is ascertained that they vary from day to day. By these variations, the time of the rotation of the planet is determined to be 21 hours, 5 minutes, and 28 seconds. Hence, the length of days and nights upon that planet do not differ, only by a very small fraction from those enjoyed upon our globe.

The intensity of light which Mercury enjoys, is far greater than what is enjoyed on the surface of the earth. It can easily be demonstrated, that the intensity of light varies inversely as the square of the distance. Therefore, if we divide the square of the earth's distance from the sun by the square of Mercury's distance, the quotient will be about 6.3. Consequently the intensity of light upon that planet is about 6.3 times greater than upon the earth. As the apparent disc of the sun is also in proportion to the square of the distance, it follows that the repellant force of day will appear nearly 7 times greater to the inhabitants of Mercury than what it appears to us. Consider, for a moment, the mountains, and valleys, and all the objects with which we are surrounded, illuminated with a seven fold splendor. Such a brilliancy would be far too great for the present constitution of our eyes; if the pupils of our eyes were contracted to about one-seventh part of their present dimensions, we should still be able, under the influence of a seven fold intensity of light, to perceive every object with the same ease and distinctness that we do now.

The splendor of the scenery upon Mercury, must be magnificently grand; the vividness of colors, radiated from surrounding objects, must be exquisitely beautiful, and the whole landscape must be adorned, as if with a gorgeous robe of light.

While Mercury enjoys 6.3 times more light than the earth, the planet Neptune only enjoys the 1.900 part as much as the earth; for Neptune is about 30 times as distant from the sun. The intensity of the sun's light on Neptune is 900 times less than what we receive; 900 multiplied by 6.3 is equal to 6000; therefore the light on Mercury is 6000 times greater than the light on Neptune. The sun at the distance of the outermost planet, discovered in the system, will subtend an angle of 1 deg. 4 sec.; and consequently will only appear about the size of the planet Venus when nearest to the earth; or, in other words, the sun's apparent diameter will be only about one-half greater than the planet Jupiter's when in opposition.

Many have supposed heat to follow the same law as light; if so, Neptune would have 900 times less heat from the sun than what we experience; and the proportion of the sun's heating power at the extremities of our system, would be as 1 to 6000. But independent of the heating power of the sun, the planetary spaces and worlds no doubt have a natural temperature of their own, modified more or less, by the heat of the sun, according to their proximity to that great luminary. One cause of the common temperature, which we have great reason to believe, exists in the celestial regions, is the combination or united heat, emanating from the fixed stars, which are known to be great suns similar to our sun.

Heat is no doubt generated, or, rather, set free by the chemical action of the materials of which the planets consist. From these two sources, it is very probable that the planets are maintained at a temperature far greater than what they would enjoy if they were dependent upon the sun alone.

The amount of common temperature, existing in the celestial regions, is very likely in proportion to the amount of star light; if so, it is comparatively easy to calculate the amount or degree of this temperature; this has been calculated by a great number of different methods, and they all concur in showing that it does not differ much from 55 degrees below the zero of Fahrenheit's scale, or about 90 degrees below the freezing point of water; now this is a degree of cold much less than what we are capable of producing artificially. Such a common temperature would operate to greatly diminish the cold that would otherwise exist in the more distant extremities of our solar system.

As Mercury is the nearest planet to the sun, its velocity, according to the law of mechanical governing centrifugal forces, is greater than that of any other planet. Its average velocity is equal to about 109,800 miles every hour; but as its orbit is much more eccentric than the earth's, its velocity varies from the mean to a much greater extent than that of the earth's. Its average velocity is 1830 miles every minute, and over 30 miles every second.

The density of Mercury is about 6 times greater than water, or about the density of lead ore, that is a globe of lead ore 3140 miles in diameter would just balance the planet Mercury; this is considerably greater than the density of the earth, and greater than the density of any other planet in the system.

The mass of this planet is 4,865,751 times less than that of the sun's. But as the materials of which Mercury consists is much heavier than the sun's materials, its bulk is about 4 1/2 times less than it would be if composed of materials similar to the sun's; consequently it would require about 22,000,000 of globes of the size of Mercury to compose one as large as the sun. The weight of bodies on the surface of Mercury is only about one half as much as they would weigh at the surface of the earth.

Venus.

The planet Venus is the brightest and most conspicuous luminary, the sun and moon excepted, that shines in the heavens. Her diameter is 7600 miles; she is, therefore, about the size of the earth, and is seen in the same position in the sky, at the distance of 68,000,000 of miles from the sun; consequently, when situated in the nearest point of her orbit, she is only about 27,000,000 of miles from the earth; and is the nearest to us of all the primary planets.

Her orbit being enclosed within that of the earth's, she never departs over about 48 deg. from the sun; hence she is never seen in the south during the night; and is never seen east of south for many hours after sunset; and never appears west of south for many hours before sunrise. When in that point of her orbit the most distant from us, she is in her superior conjunction, being 163,000,000 of miles from the earth; and when in that point of her orbit between the earth and sun, she is in her inferior conjunction, and is then over 6 times nearer to us than when in the other conjunction. If the whole of the hemisphere of Venus, turned towards us, when at the inferior conjunction, were enlightened, so as to be visible, she would present a disc over 36 times greater than she appears at her superior conjunction. But when at the inferior conjunction, her dark hemisphere is turned towards the earth, which renders her invisible.

The time occupied by Venus in passing from her inferior conjunction to the same conjunction again, is about 584 days. For about 35 hours previous to and after the inferior conjunction, Venus cannot be seen by the telescope as easily seen; and for about 6 3/4 days preceding and following the superior conjunction, it is difficult, if not impossible, to see Venus in consequence of the splendor of the sun's rays. Therefore, by the aid of the telescope, Venus may be rendered visible 567 1/2 days out of 584; while to the unassisted eye, she will be visible only about 3 1/4 of her synodical period, or 440 days.

The real sidereal period of Venus is 224,700,786.9 mean solar days. One synodical revolution of Venus is more than 2 1/2 times longer than her real period.

Venus, like the planet Mercury, passes through every variety of phase, similar to the moon; these phases are easily perceived by the telescope; some-

times they appear of a crescent shape; sometimes half the disc is seen; at other times they are gibbous; and at other times they appear full.

Soon after the planet passes her inferior conjunction, she will appear a short distance west of the sun, and consequently will be seen just before sunrise in the east; each succeeding morning she will rise a little earlier, moving gradually to the westward of the sun, until it attains to its greatest western elongation, when, for a few days, it apparently remains nearly stationary, and then moves gradually to the east until it arrives at its superior conjunction.

When the inferior to the superior conjunction embracing a period of about nine months, Venus is called the *morning star*, though for several days, when near the conjunction, she is not visible to the naked eye. After passing her superior conjunction, and emerging from the sun's rays, she will appear on the east of the sun, and will be seen soon after sunset. And each succeeding evening she will appear to have advanced to the eastward until she attains to her greatest eastern elongation, when she will, for a short period, appear to remain stationary and then to apparently retrograde towards the sun or to the west, when near her inferior conjunction she will again be lost in the glare of the sun's light. At the greatest eastern and western elongations, Venus never rises above the eastern and western horizons over about 48 deg, or about one-half the distance from the horizons to the meridian.

By the motions of the telescopic spots observed on Venus, it has been ascertained that it has a rotation upon its axis in 22 hours and 21 minutes.

The position of the axis of a planet is determined by observing the direction of the spots across its disc; this has not been, as yet, very accurately observed in regard to Venus, but from the few imperfect observations which have been taken, it is believed, that the axis of Venus has a position in reference to its orbit very different from that of the earth; while the axis of the earth is inclined only 23 deg. 28 min. from the perpendicular, the axis of Venus appears to be inclined 75 deg. from the perpendicular to the plane of its orbit. This circumstance will render the seasons on Venus far more changeable than upon the earth. The inhabitants in the same latitude, will, in the period of 225 days, experience every vicissitude of climate, manifested in the torrid, temperate, and frigid zones of the earth. The inclination of the axis of Mercury is also believed to be much greater than that of the earth; if so, the variety of changes in Mercury's seasons will be much greater than what is experienced on our globe.

The degree of heat and light received from the sun on Venus will be nearly double the amount which we receive; and the sun's disc will appear as large again to the inhabitants of Venus as it does to us. But the temperature will doubtless be greatly modified by surrounding circumstances, such as the density of the atmosphere—the amount of clouds surrounding the body, and the nature of the materials composing its surface.

The telescope reveals several large mountains on the planet Venus, one of which is stated to be 23 miles in perpendicular height, another 19 miles; a third 11 1/2 miles, and a fourth 10 3/4 miles in elevation. These mountains are far higher than any upon our globe.

We can form some conception of the awful grandeur of these towering elevations, by imagining the chain of mountains bounding this valley on the east to be raised up 17 times higher than they are now. Such a mountain scenery would be worth visiting; while the view from the top of such an elevation, would scope in many hundreds of miles in all directions.

From careful observations of the twilight observed on Venus, it is believed that her atmosphere is very dense for some 3 or 4 miles above the surface, and consequently that her atmosphere extends far above the highest of our mountains. If these observations and calculations can be depended upon, the surface of Venus will be in a measure protected from the intense glare of the sun's rays, and consequently it can be inhabited by beings not differing materially in their constitution, from us.

Several observers have been of the opinion that Venus is accompanied by a satellite, although seldom seen. A luminous appearance has occasionally been seen a short distance from the disc of Venus, exhibiting the same kind of phase as Venus, and about one-fourth the diameter of the planet; it has been observed to move, and its supposed period is about 11 days, 5 hours, and 13 minutes. Its distance from Venus is supposed to be about 259,000 miles. The inclination of its orbit to the ecliptic is very great, being about 63 3/4 degrees. The observations on which these calculations are founded, being very imperfect, cannot fully be relied upon, therefore astronomers are still doubtful whether such a satellite exists. It is very evident that if Venus have such a satellite, it could not very easily be discovered. The most favorable positions of Venus for discovering its satellite, if it have any, are when that planet is near its greatest elongations east and west, or when about 48 deg. of the sun; for then the reflection of light reflected from the satellite and reaching the eye would be greater than in any other position.

The transit of Venus across the sun's disc takes place about twice in one century. In 1874, December 8th, at 8 hours and 40 minutes in the evening mean time at Salt Lake, there will be a transit of Venus; but being after sunset it will not be visible in this city. There will be another transit which will be visible in Utah Territory—the middle of the transit will happen about 8 hours 48 minutes in the morning of December 6, 1882 mean time at Salt Lake city. We have already observed in some of our former lectures, that the transit of Venus affords the surest and best method of finding the true distance of the sun from the earth. Venus revolves in an orbit 433,800,000 miles in circumference. Its average velocity per hour is about 80,000 miles; equal to about 1330 miles every minute, and above 22 miles every second. The density of Venus and the earth is about the same, and bodies will weigh nearly the same at their respective surfaces. The orbit of Venus approaches nearer to a circle than any of the rest of the planets; its eccentricity being only about 492,000 miles, or the 138 part of its mean distance from the sun. The inclination of the orbit of Venus to the ecliptic is only 3 deg. 23 min., 23.5 sec.; therefore its greatest deviation from the ecliptic either north or south, never exceeds seven apparent diameters of the sun. Its mean apparent diameter is 17 sec., and its greatest about 57 1/3. Its mean arc of retrogradation from east to west, contrary to the order of the signs, is 16 deg., 12 min., and its mean duration about 49 days.

We have thus given a very brief outline of the principal phenomena characterizing the two interior planets of the solar system. Much more might be said upon these interesting subjects; but we shall necessarily have to be very brief in order to include within the small compass of twelve lectures the most striking and interesting particulars, pertaining to this grand and sublime science of the heavens.

The public debt of the State of New York is \$21,630,802.

The Montieur offers a prize of 50,000 francs for the discovery that shall render the voltaic pile applicable, with economy, to industry, as a source of heat—to lightning, chemistry, mechanics, or medical practice. All nations are admitted to compete during five years.

The editors of all the journals in Hungary have been obliged to send in to the authorities a list of all their subscribers.

PRINCE DE JOINVILLE.—The northern despotism of Europe are opposed to the candidacy of the Prince de JOINVILLE for the Presidency of France. They think he is not the man; nor his intention to run for President, that way to secure monarchy on a solid basis, that is, on the basis of absolutism.

ON TRIAL.—ROBERT MORRIS, the colored lawyer, was put on trial at Boston, on the 31st ult. in the District Court, for aiding the Shadrach rescue. Judge Curtis refused a motion of the defendant's counsel to have the case tried in the Circuit Court. MORRIS is defended by Hon. J. P. HALE, and R. H. DANA; Jr.

S. HOTCHKISS, M. D., DENTIST, Residence west side of 14th ward, opposite sheriff Ferguson's. nov15-14

STRAYS.
CAME into the subscriber's enclosure, last fall, one Red Stag, five or six years old, small crumpled horns, with some white in his face, white round his nose, and white stripe under his belly. Also, one Red Stag, four or five years old, with some white under his belly, no BRANDS. The owner is requested to prove property, pay charges, and take them away.
GEO. ALLEN,
mar20-10tf Near head of East Temple st.

DOMINICO BALLO, TEACHER of Music, Military and Civil, upon Brass or other instruments. He is prepared to arrange Music and give lessons upon one, two, or more instruments, or for Military Bands, in any part of the Territory. For particulars, as to terms, etc., apply to
D. BALLO,
Professor of Music,
First house East of the residence of Dr. Hotchkiss.
ap3-11-6t

LOOK TO PUBLIC GOOD!
M. H. PECK, Blacksmith, 17th Ward, hereby requests all persons indebted to him for Blacksmithing, &c., to call and settle forthwith; which may be done through the Tithing Office, or at the Church Store, Lumber, or Country Produce.
All kinds of Blacksmithing, Horse shoeing, &c., done as usual on reasonable terms, for pay as above. Cash not refused.
mar20-10tf

NOTICE.
STRAYED.—From this place in October last, a large Grey California Horse, the property of Heber C. Kimball. The same may be known by the following brand marks on his nigh lip, and high shoulder; stands about fifteen hands high; very full below the eye; unmarked on his back by hurt from saddle. Any one finding the above named Horse and giving information to the owner shall be amply rewarded.
feb21-8-4f

NOTICE.
THE Proprietors of the Big Field west of Jordan river have ordered, that the fence thereto be put in good order by the first day of May next. Therefore all persons interested, will please to take due notice and govern themselves accordingly. As the Committee, accompanied by a fence-viewer of the county, will examine and approve or condemn said fence; if condemned, the committee are authorized to cause it to be put in lawful condition at the expense of the owners as prescribed by law.
Per order of the committee.
ap3-11tf A. P. ROCKWOOD, Clerk.

THE COTTONWOOD CANAL
IS SURVEYED and ready for the laborers; and unless completed soon, much land must go without irrigation this season. Those owning land in the vicinity, and wanting water, can have the chance of making the whole, if they choose. I am ready to pay liberal wages for the completion of the whole or any part thereof, in the use of the water, or orders on the Treasury, which will be some of the best property in the Territory. Now is the time; come on; first come, first served.
IRA ELDREDGE,
Ter. Commissioner.
ap17-12tf

NOTICE.
THE 22d Quorum of Seventies will meet at the house of Jonathan Fugate, jun., cor. Emigration and West Temple streets, 7th Ward, on Saturday May 20th. Punctual attendance is requested.
N. B. All those that cannot attend, will please forward their names and places of residence as soon as possible.
DAVID CLUFF,
ALEXANDER WRIGHT, } Prests.
ANDREW HENRY.
ap17-12-4t

STRAYED.
FROM the west side of Jordan, a yoke of oxen, one black, with a white spot on each side of the neck; the other a pale red. Said oxen were branded with J. H. on each horn. Any person giving information to Andrew Henry, of the 14th Ward, where said oxen can be found, will be liberally rewarded.
mar20-10tf ANDREW HENRY.

CALVES.
100 CALVES Wanted, for which we will pay Five Dollars per head in Wood and Hay—the Calves to be nine or twelve weeks old. We will take the Calves and deliver the Hay and Wood at the owners' dwelling.
ISRAEL BARLOW,
WM. S. MUIR.
mar20-10-8t

ESTRAY.
NOVEMBER last, from Dr. Richards' Pasture, one RED OX, six years old, horns bend in at the top, on a long wart forward of the hip bone, high side. Whoever will return said ox to Newell Bullen, shall be suitably rewarded.
ap17-12tf SILAS P. BARNES.

NOTICE.
I WOULD just say to all indebted to the firm of J. & E. Reese prior to the arrival of their last train of goods, that they are requested to call and settle their accounts immediately, either by note or otherwise. We will in payment of such debts, take Wheat, Flour, Stock, or Lumber at fair rates. By attending promptly to the above, you may probably save a little time and expense.
ap17-12tf J. & E. REESE.

MRS. D. E. ARMSTRONG, MILLINER, Dress Maker, and Straw Bonnet Maker, respectfully solicits the patronage of the ladies of this city and vicinity; hoping by strict attention to business, to give that satisfaction which she will endeavor to merit.
Ladies' own materials made up on the shortest notice.
Residence 15th Ward, opposite the N. W. corner of the Old Fort.
jan24-6tf

HAIR! HAIR!
100 BUSHELS HAIR wanted immediately at the Public Works. The brethren who are killing their hogs will confer a favor by saving all the hair and bristles and bring the same to the Public Works for which they will be allowed a fair price on their Tithing.
feb7-7tf D. H. WELLS, Supt. P. W.

STOLEN OR STRAYED.
FROM the other side Jordan, a white cow, black ears, black nose, short crumpled horns, branded on the horn, T. Crooke.
Any person returning or giving information, will receive a due reward from Thos. Crooke, of the 6th Ward.
ny1-13tf THOMAS CROOKS.

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