DESERET NEWS.

Truth and Liberty.

NO. 36. GREAT SALT LAKE CITY, WEDNESDAY, NOVEMBER 10, 1858. VOL. VIII.

[For the Deseret News.

CASTE.

Worth makes the man, and want of it the fellow.--POPE.

Caste, the pet child of ignorance and pride,
The heathens own it, Christians it deride;
But which most love it would be hard to say,
For both observe it better than to pray.

The caste-curst Hindoo pitying we'll pass,
And seek a saint from out the Christian mass;
We'll scan his conduct, and his manners too,
And see if aught like caste he keeps in view.

In yonder mansion lives a saint, 'tis said,
Immaculate, and like his Master bred;
He preaches, prays and much 'gainst sin decries,
And sinners stand as satan in his eyes.

But ah! that very "saint" I've seen pass by
A begging brother--turning not his eye,
While, farther on, he with a merchant meets
And oh! how kindly this dear friend he greets.--

Invites him home to dine (for he had spared
No pains nor means to have a feast prepared
For a large company of the elite
He'd called to eat, drink, dance and spend the night.)

The poor, the lame and blind he feasted not,
For such, he knew, had naught, so naught they got;
But such, as he thought, would best repay
Were more than welcome to his feast that day.

Example here of caste, thought I, is given,
Even at the very gates of heaven:
One brother begs the wages he has won
Is spurned, the next must feast though naught he'd done.

In vain that "saint" doth pray, "Lord make us one;"
Vain, too, is all the preaching he hath done.
Fools who despise the poor reproacheth God,
And for their backs he hath prepared a rod.

'Tis not the man of high patrician birth
Who's most presumptive to the poor on earth,
A slave made sovereign's more despotic far
Than Indian Mogul or Russian Czar.

Most hateful 'tis to see a would-be-great
Aping a higher than his real state,
"Scraping acquaintance" with the upper class
While old acquaintance struttingly he'll pass.

The world's full of this upstartish spirit;
Arrogance ride rampantly o'er merit;
The long-faced pharisee's once more in vogue,
E'en satan now might preach and not incog.

Who does the good, the same is good alone,
Whether in torrid or in frigid zone.
With a good heathen I'd live more content
Than with a haughty, knavish, soulless saint.

Hail to the man whose noble welf-poised mind
Nor place nor flattery nor wealth can blind,
A bright example of a holy creed,
That man to mankind is a friend indeed.

What a pleasing sight for heaven 'twould be
To view us all in holy unity,
Like Enoch's band all one and no one poor;
'Twill yet be so if prophets' words are sure.

O caste! thou art society's fell curse,
The bane of brotherhood, disunion's nurse;
Speed thy destruction,--war with it heaven,
Till its last vestige from the earth be driv'n.

MATTHEW ROWAN.

SOUTH COTTONWOOD, Oct. 15, '58.

[From the Saturday Evening Post.]

History of the Electric Telegraph.

In connection with the great triumph of science which has just been achieved, the following *resume* of the history of the processes through which the electric telegraph has passed, in obtaining its present perfection, will be found interesting. It shows that to a large number are due portions of the credit:—

1726.—An Englishman, named Wood discovered that the electric fluid could be conducted long distances by wires.

1746.—Herr Winkler, of Leipsic, discharged a Leyden jar by a friction machine, through a wire of considerable length, the river Pleis forming part of his circuit.

1747.—Dr. Watson made a successful experiment of a similar character, over a space of four miles, at Schooter's Hill, near London, embracing his circuit of two miles of wire and of equal distance of ground. A writer in the Philosophical Transactions (vol. xiv. 1848) gives him the credit of having been the first to suggest the application of electricity to telegraph purposes.

1748.—Dr. Franklin set fire to spirits by an electric current sent across the Schuylkill on a wire and allowed it to return by the river and earth.

1774.—M. Lesage, of Geneva, constructed an electric telegraph, consisting of twenty-four wires, each properly insulated, and terminating at one end of either was put into communication with the prime conductor of an electrical machine, the ball was repelled, and a corresponding letter thus indicated.

1784.—M. Lomond, of France, communicated telegraph signals to a neighboring room by means of a potato ball electrometer acted upon by electricity.

We find a record of it in the *Anthologia Hibernica*, for September, 1794, vol. 4, published in Dublin.

"In electricity M. Losmond has made a remarkably discoverp; you write two or three words on a paper; he takes it with him into a room, and runs a machine inclosed in a cylindrical case, at the top of which is an electrometer, a small fine pith ball; a wire connects with a similar cylinder and electrometer in a distant apartment, and his wife, by remarking the corresponding motions of the ball, writes down the words they indicate, from which it appears that he has formed an alphabet of motions. As the length of the wire makes no difference in the effect, a correspondence might be carried on to any distance—within and without a besieged town for instance—or for a purpose much more worthy, and a thousand times more harmless, between two lovers prohibited or prevented from any better connection."

M. Reise illuminated letters upon plate glass, formed of tin foil, by means of electricity.

1795.—M. Clavalo proposed to form an electric telegraph by firing a gas pistol at the distant end of a wire, and thus to give signals.

M. Savary attributes the first idea of an electric telegraph to Dr. Franklin.

1798.—Betancourt established a telegraph between Madrid and Aranjuez, a distance of twenty-five miles through which a current of electricity was passed and gave signals for letters.

1809.—Soemering constructed the first galvanic telegraph at Munich, which operated by the decomposition of water, and which he also caused to ring a bell at the opposite end of the wire. Soemering's was the first decomposition or chemical telegraph, and can be even now successfully, but less rapidly, worked than Bain's.

1816.—Dr. John Redman Coxe, of Philadelphia, proposed to establish an electric telegraph, and to make signals at a distance, by the decomposition of water and metallic salts, causing a change in color to ensue.

1819.—Professor Persted, of Copenhagen, discovered electric magnetism, or electric magnetic motion.

1820.—M. Ampere, of France, discovered the electro magnetic telegraph. This he constructed of as many wires as there were letters, and used the deflection of the needle as a signal. He broke and renewed the circuits by finger keys, something similar to those of the keys of a pianoforte.

1823.—Francis Renalds, of England, proposed a telegraph by the use of frictional electricity. In his arrangements there were clocks at the station which kept time with each other, and which were furnished with a light disc of cyphers in place of hands, having twenty different signs towards their circumference. At the moment the proper sign on the disc passed before the index at one station, the spark was discharged, and the electrometer placed at the other discharged, and caused the signs on the disc at the other to be noted. The telegraph is stated to have extended to Hammersmith, eight miles, and to have used the discharge of a gas pistol as an alarm.

1825.—Mr. Barlow, of Greenwich, England, made an attempt to put a galvanic telegraph in operation, but was baffled by the diminution of the fluid, when he endeavored to transmit it for a great distance, so as to produce mechanical effects. This difficulty the discoveries of Henry, however, afterward overcame.

In the same year Mr. Sturgeon, of England, constructed the electro-magnet by coiling a copper wire round a piece of iron of a horse shoe form, the bent turns of the wire being so far apart as to prevent contact. He found that when the electric fluid passed through this coil, the enclosed iron became a magnet, and was again de-magnetised in breaking the current. The wires were afterwards coated with non-conducting substances, and wrapped around the iron in close contact, as we now see them.

1826.—Mr. Harrison Gray Dyar erected a telegraph on Long Island, in New York. He used frictional electricity, and dyed marks on chemically prepared paper by the passage of sparks.

1831.—Professor Joseph Henry, of Princeton College, discovered a method of forming magnets of intensity and quantity produced from correspondent batteries, and by the use of which, with relay magnets, etc., prepared by him, he made known the practicability of producing mechanical effects at a great distance, say 1,000 to 2,000 miles.

1832.—Baron Schilling, of St. Petersburg, contrived a deflective magnetic telegraph, which had an alarm bell connected with it.

1833.—Gauss and Webber first constructed the simplified electro-magnetic telegraph. It was Gauss who first employed the incitement of induction and demonstrated that the appropriate combination of a limited number of signs is all that is required for the transmission of communications. Webber discovered that a copper wire 7,400 feet long, which he carried over the houses and church steeples of Gottingen, from the Observatory to the Cabinet of Natural Philosophy, required no special insulation. This was an important point of discovery in the construction of telegraph lines, and is made available to the present time.

1837.—Steinheil constructed and put in use between Munich and Bogenhausen, in the July of this year, his registered electro-magnetic telegraph. By the deflection of a needle he produced dots or short marks on fillets of paper to stand as signals for letters, etc., the paper being drawn forward by clock work in an endless slip or ribbon.

On the 12th of June of this same year, the deflective electro-magnetic telegraph of Cook, of Wheatstone, was patented in England. They first employed receiving and relay magnets.

In the October following, Samuel F. B. Morse, of New York, entered his first caveat for an American electro-magnetic telegraph, in which he chiefly relied on a kind of type and port rule for making signals by the mechanical force of electro-magnetic motion. Morse claimed that he first thought of a magnetic telegraph on his passage to the United States in the brig Sally, in the year 1832.

1838.—Edward Davy, of London, had his patent sealed for a chemical telegraph, which was enrolled January 4, 1839. In this plan he employed chemically prepared paper, similar in its general character to that used on the instrument of Bain.

1846.—Alexander Bain obtained his English patent for his improved electro chemical telegraph, and got his American patent 1850.

1847.—Royal E. House, of New York, obtained, in conjunction with Mr. Brett, a patent for their ingenious and valuable printing electric telegraph.

1848.—Messrs. Zook and Barnes, of Cincinnati, invented a modification for the electro-magnetic telegraph, by combining fixed magnets with the use of electro magnets.

1849.—Monday, 28th of January.—The memorial of Horatio Hubbell, of Philadelphia, in which he was joined by John H. Sherburne, was presented to Congress, praying for aid in constructing a telegraphic communication across the Atlantic Ocean, setting forth the existence of a table land plateau on soundings between Newfoundland and Ireland, upon which the said telegraph could be constructed, and entering into other details in order to carry out the project. It being the first devised and first published plan ever made to carry a telegraph across the ocean.

Mr. Horn, of New York, invented his igniting telegraph, which made dots and lines by burning them on slips of revolving paper by the heat of the electric fluid while passing.

About the same time Mr. Johnson, of New York, contrived a machine worked by electro-magnetism to let that drop on to slips of paper, which being prepared at the same moment, for visible marks which stood as signs for letters.

Also about the same time, Mr. Daniel Davis, of Boston, prepared an Axial telegraph, which with that of Horn and Johnson does not seem to have met with much attention.

1855.—Mr. Hughes obtained his patent for his ingenious and admirably combined printing telegraph, which is destined to effect a revolution in all the existing systems. Its superiority consists in its working reliably on a larger circuit than any instrument previously invented. Not only does it transmit messages with greater rapidity, but it has the advantage of receiving and transmitting simultaneously on a circuit of at least 5,000 miles, performing the work of two ordinary wires on one; it is also less liable to interruption from atmospheric electricity.

The total length of telegraph lines in 1858, so far as was ascertained, was 96,850; of which there was in America, 45,500; in England 10,000; France 8,000; Germany and Austria 10,000; Prussia 4,000; Russia 5,000; the rest of Europe 7,350; India 5,000; Australia 2,000; other parts of the world 500. The number of messages passing over all lines in the United States is estimated at about 4,000,000 per annum.

Until the year 1850, the submarine cable was practically unknown. In this year, the first submarine cable was laid from Dover, England, to Calais, France. The cable was twenty-four miles long, and has since been in operation, with one interruption, with complete success. Since that period, 950 miles of submarine cable have been laid in twenty-seven different lines, the two longest of which are, across the gulf of St. Lawrence in 1856, 74 miles; between Varna and Balaklava, across the Black Sea, in 1855, 340 miles.

TELEGRAPHIC INSTRUMENTS.—The following describe the various recording instruments now in use, with the chief differences between them:

First.—The *Morse* Instrument, in common use in this country, transmits messages by the alternate breaking and reconnecting of the electric current. The current, allowed to flow a moment, produces a dot; if a little longer, a line. Thus the alphabet is composed of combinations of lines and dots. Rate of communication, about twenty words a minute.

Second.—In the *Cook and Wheatstone* Instrument, a needle on a dial plate revolves, pointing out the letters, which are inscribed around the circumference, like the hours on the face of a clock. Rate, about fourteen words a minute.

Third.—The *House* Instrument, prints the messages in Roman capitals, on a long strip of paper, by the revolution of a type wheel, the operator playing on a key-board, with a key for each letter. Rate, twenty-five or thirty words a minute.

Fourth.—The *Hughes* Instrument, is a combination of the Morse and House inventions.

Fifth.—The *Bains* Instrument, patented the last month, and named, "The Embossing and Self-Adjusting Printing Telegraph." By this instrument, the letters are not only handsomely printed on paper, but also raised or embossed, so that they can be read equally well without the use of ink. This instrument is so simple in its arrangement that at the very first sight any person of ordinary capacity can send or receive a dispatch, at the rate of twenty-five words a minute—about as fast as one can write legibly with a pen. By this simple and cheap instrument, telegraphing is likely to become very much extended throughout our country.—[School and Home Journal.

Inauguration at Leeds, England.

It is estimated that two hundred thousand people assembled at Leeds the other day upon occasion of the inauguration of the new town Hall by Queen Victoria. Thirty thousand children were arranged in a body to sing to the Queen. The following paragraph from the correspondence of the London Journal will give an idea of the grandeur of the reception the Queen received:

The greatest scene along the whole route of her Majesty's procession was at Woodhouse Moor, where the children of the charity and free schools were mustered, to the number of nearly 29,000, of almost every age and every religious denomination. On the banks of the reservoir which bounds the western extremity of the plain of Woodhouse Moor was collected some 60,000 or 70,000 persons, who had made the best of the vantage ground which was here presented. Tier above tier they rose in dense masses to the height of perhaps thirty or forty feet, and it may be questioned whether such a multitude was ever before seen packed into so small a space. In the centre of the amphitheatre formed by these living walls stood the children, in two huge divisions, amounting to (inclusive of teachers) more than 16 000 each, divided into districts, parishes and schools, and distinguished by their orange, crimson, or blue banners. The children were disposed upon two immense platforms or galleries, between which the Royal cortege passed, each being about 170 yards in length; depth, 27 and 45 feet respectively. In the center was a tall sort of elevated pulpit for the general director and his assistants, and above this was a rostrum, in which stood the musical conductor, the movements of whose baton were to sway and to modulate the fresh young voices of the crowd beneath him. From this center, radiating equally on all sides, were posted signalmen with huge boards, on which were printed in the largest of letters the various signals, as, "Prepare to cheer!" "Sing!" "Silence!" and "Dismiss!"

At the time her Majesty started the clouds broke up, and the sun shone fully as she came upon the moor amid the children. As the cortege came in sight of the children's platforms the signals "Prepare to cheer" rose up on every side, but they were needless; the difficulty was to keep the children quiet. Nearly 30,000 little trebles set agoing are not so easily stopped; and some time elapsed before the shouts ceased, and the thundering bass accompaniment of the populace outside—mostly the parents of the children—went rumbling away in a hoarse roar in the distance.

Then the conductor waved his hand, and slowly swelling upwards, like a vast organ of human voices, came "God Save the Queen."—With the first notes her Majesty held up her hand, and the carriage halted in the centre of the moor amid the children, while the great choir of singers went pealing forth their anthem with such a truth and sublimity as seemed to move even the most distant hearers.—When this was over, the procession continued its way, and the hymns of the children continued—the long soft notes of every psalm resounding far and near, and making themselves heard above the cheering, even when the procession was wending its way through the most crowded parts of Leeds.

From this point her Majesty's reception was as grand in its enthusiasm as anything could be For nearly four miles it was one continued ovation. At the Townhall the crowds were so great that the barriers seemed quite inadequate, and at last bent, cracked, and splintered be-