Montana Post---Supplement.

Virginia City, Montana Territory, January 27, 1866.

OUR SUPPLEMENT.

Ever striving for a place in the foremost ranks of the great body of improvers, we appear to-day before the public with this Supplement, which we offer as an earnest of our zeal in their service. It is not for us to say how we have succeeded; but we can assure our readers that from the issue of our first number until now, we have spared no possible effort to improve the POST. The size of our press prohibits the employment of a larger sheet than the one which we now publish, and we therefore purpose to furnish a Supplement every week, filled with news matter of general interest. As soon as our senior partner returns from the East—whither he has gone for the purpose of purchasing the necessary presses, type and material—we shall publish a sheet double the size of the POST. Until then, our patrons will kindly bear with us, and take into consideration the many disadvantages under which we have labored, and the numerous difficulties we have had to encounter in starting the pioneer paper of the Territory. In return for our faithful attention to their interests, the patronage of the people of this Territory have made us what we now are, and we are determined to reciprocate their favors by laying before them a journal worthy of Montana. D. W. TILTON & CO.

GREAT MARCHES.—In Secretary Stanton's report on the war, the following statement of the marching performances of the United States' soldiers, appears. The reader will smile when he recalls the lofty panegyrics that have been written by European authors upon the march on Moscow, and the passage of the Alps by Napoleon. The retreat from Moscow was more like a parallel to their labors and exposure; but it ended rather differently:

"The Twenty-third Army Corps, after fighting at Nashville, in the midst of ice and snow, in December, 1864, was, on the conclusion of the campaign in the West, transferred from the Valley of the Tennessee to the banks of the Potomac, moving by river and rail down the Tennessee, up the Ohio, across the snow-covered Alleghanies, a distance of fourteen hundred miles, and in the short space of eleven days was encamped on the banks of the Potomac, then blocked up with the ice of a most severe winter. Vessels were collected to meet this corps, the obstacles interposed by the ice were overcome, and early in February the troops composing it were fighting before Wilmington, on the coast of North Carolina.

"The transfer of the Eleventh and Twelfth Corps, under Gen. Hooker in 1863, from the Potomac to the Tennessee, is the only parallel to this movement. That was an almost unexampled operation at the time. Gen Hooker's command contained twenty-three thousand men, and was accompanied by its artillery and trains, baggage and animals, and accomplished the distance from the Rapidan, in Virginia, to Stevenson, in Alabama, a distance of eleven hundred and ninety-two miles, in seven days, crossing the Ohio River twice. The Twenty-third Army Corps moved fifteen thousand strong."

SINGULAR SUIT AGAINST BOSTON.—The special Boston correspondent of the Sacramento "Union" gives the following account of a novel suit against the municipality of the City of Churches: There has been a good deal of talk lately about a suit just brought in our Supreme Court by one Charles Burrill, of Brookline, against the city of Boston, for about one million dollars. The facts in the case are about as follows: In May, 1864, while the city was endeavoring to raise our quota of troops under the last call, Charles Burrill was appointed a recruiting officer for the city, and in that capacity visited Washington, where, he claims, his influence prevailed upon Congress to allow the credit to States of naval recruits, Boston had sent about seven thousand seamen into the navy, and the placing them to her credit, as was done by act of Congress, passed in July, 1864, was a matter of no little advantage to her. As soon as this Act was passed, Burrill made out a list of these seven thousand names, copied from the books of the receiving-ship, and claimed that he was entitled to the usual bounty of $125 per man—making the snug litle sum of $800,000. This claim he presented to the Mayor, who promptly rejected it, and has continued to reject it—at one time being obliged to eject Burril from his office on account of the latter's impertinence. Some members of the city government were in favor of compromising with Burril, by paying him $125,000, but Mayor Lincoln refused his consent. So Burril has brought an action for the whole amount, which will probably come on for trial at the February term, at Dedham. He has retained seven lawyers, among them some of the ablest in the State—General Butler, P. W. Chandler, A. A. Ranney, and J. H. Bradley. Burrill is not generally known, but I believe he is an agent for some patent furnace, and has an office on Tremont street.

CHINESE CHRONOLOGY.—The Chinese, as our readers are generally aware, says the San Francisco "Alta," do not reckon time according to our system of twelve months of unequal length in the year, but make up the difference by occasionally throwing in an odd month to make it come out even in the long run. This, of course, makes their New Years come in at irregular intervals. Last year it came on the 26th of January; this year it will fall on the 14th of February, our St. Valentine's day. Their year corresponding to our 1863, will, according to their standard of computation, be styled the "Fifth Year of Tong Gee," that is to say, the fifth year of the reign of the present Emperor. whose name is Tong Gee.

[From the Chicago Tribune.]

A New Motive Power----Danford's Steam Generator---Probable Revolution in Steam.

A citizen of Geneva, Ill., named Wm. E. Danford, has invented a method of applying superheated, dry or anhydrous steam as a motive power, and such is the force with which it acts; the economy of fuel and water; the saving of weight and space in the generative machinery, and the perfect safety attending the employment of the motor, that it bids fair to revolutionize the present method of applying steam to the driving of machinery. Like nearly all great inventions, this new one possesses the merit of extreme simplicity. The inventor was one day struck with the vibratory motion of a kettle standsng on the top of a hot stove, and found, on examination, that the motion was produced by the vaporization, at a high temperature, of single consecutiye drops of water which fell on to the highly heated surface of the stove. He was astonished to see the enormous power exerted by a single drop of water converted into superheated steam, and after studying for a short time, he made a model by which the practical working of his newly discovered principle was exemplified, and it was so successful, that in a short time, he resolved to build the new five-horse-power engine now at work at No. 90 West Lake street, Chicago, and which, upon a three days' trial against a fifteen-horse-power engine, with a locomotive flue-boiler—during which the same engineer weighed the coal and measured the water consumed by each—the following results were obtained:

FIFTEEN-HORSE ENGINE AND BOILER.

Fire surface	310 ft.
Pressure per inch	40 lbs
Coal consumed per hour	101¼ lbs
Water evaporated per hour	80 gls
Corn ground per hour	18 b'sh

DANFORTH'S STEAM GENERATOR AND 5-HORSE ENGINE.

Fire surface	22¼ ft.
Pressure per inch	110 lbs
Coal consumed per hour	53½ lbs
Water evaporated per hour	25 gls
Corn crushed per hour	27 bsh

These figures tell their own story. With one fourteenth part of the fire surface, thirty-three per cent. more labor was done by Danford's little generator than was accomplished by a fifteen-horse locomotive boiler, and that, too, with one-half the [illegible] consumption of fuel. Danford's generator actually got twenty horse power work out of an engine built for a five or six-horse power boiler. Twenty-five gallons of water in the form of superheated steam proved to be thirty-three per cent. more powerful than eighty gallons of water in the shape of saturated steam. In other words, one gallon of water in the condition of "dry steam" is equal in efficient power to nearly five gallons in the condition of "wet steam." Consider the tremendous power superheated steam would give to a river or ocean steamer. A five-hundred-horse power engine, as now rated, could be made to exert two-thousand-horse power of force against the waves, winds, or currents. May not the Atlantic yet be crossed from New York to Liverpool within a week, by vessels propelled by superheated steam? We look for such a result when the new principle of generating shall be applied to ocean navigation.

Ordinary, or wet, steam is produced by applying heat to a close boiler, about two-thirds full of water. The steam thus generated holds water in suspension, and is, therefore, sometimes called saturated steam. At the temperature of boiling water, 212 deg., water turns into steam, and presses against the sides of the boiler, with a force of about fifteen pounds to the square inch, and one cubic inch of water becomes changed into a cubic foot of steam. Greater heat rapidly increases the expansive power of the steam, as shewn by the following table:

HEAT—PRESSURE TO INCH SURFACE.

Degrees.	Pounds pressure	or Atmospheres.
212	14¾	1
234	22	1½
250	29½	2
264	37	2½
274	45	3
292	60	4
306	75	5
340	120	8
357	150	10
389	225	15
415	294	20

The most simple method of showing what superheated steam is, will be the description of the means employed in its generation: Danford's boiler differs from the ordinary boiler in having no water in it—nothing but highly rarefied steam, which is generated as fast as consumed by the engine. Instead of a boiler he calls it a "generator." His generator consists of a hollow cast-iron globe or large pot, 2½ inches thick, suspended in an ordinary furnace as a pot or kettle may be suspended over the fire. There is a casing to enclose the fire and conduct it around the generator and up the chimney, where by the way, much caloric is uselessly wasted. An iron tube, made of ¾-inch gas pipe, enters the globe or generator at the top, and is conducted down to its center, where it terminates in a rose sprinkler, perforated with forty or fifty fine holes. By means of an injection pump, about a table-spoonful of water is spread into the generator at each stroke of the pump, in the form of spray. This spray does not come in contact with the sides of the generator, for before it can reach that far it is expanded into hot steam. No explosion can take place, because there is no water in the generator to explode. The water from the tube is already exploded on entering the generator; that is, it passes instantaneously from the state of spray into that of super-heated steam. No further expansion is possible. If the superheated steam should separate into its constituent gases—oxygen and hydrogen—they would produce no greater pressure nor expansion.

The generator which Danford is using is capable of sustaining a pressure of 5,000 pounds to the square inch, but the steam guage shows that with 600 degrees of heat there is only 150 pounds of pressure. It is the opinion of Horatio Allen, of the Novelty Works, New York, that the generator is unnecessarily thick, strong and heavy, though it weighs less than half as much as a six-horse power boiler filled with water. Allen thinks that a generator one inch thick, of cast-iron, is amply strong.

The extreme durability of the generator, which will last fifty years, when compared with the constant and rapid deterioration of boilers, and their liability to encrust, together with the assured safety that attends its use, must make it a SINE QUA NON in railroading, remote steamboat expeditions, and, in fact, in every department of locomotion and stationary engine driving, where economy and saving of space are considerations. Seven hundred tons burden would be gained in an ordinary Atlantic steamer by the new plan, and as superheated steam is so vastly more powerful than the wet steam usually employed, river boats may race up a stream they could not, before, offer to stem. Probably, a week will be the usual length of an Atlantic voyage, when the new principle is adopted.

[From the Memphis Appeal, Nov. 29th.]

Dreadful Steamboat Disaster--Collision of the Niagara and Post Boy.

It is an old maxim with steamboat men that "accidents never come singly," which has been, alas! too often verified upon our Western waters, as is evidenced by the burning lately of the Tycoon, which was soon followed by the sinking of the Ben. Stickney, and the burning of the Duke, and again we are called upon to chronicle another and more fearful marine disaster, involving an immense loss of life.

From Greenough, clerk of the Niagara, we learn that on Friday night, about nine o'clock, when about seven miles above Helena, they discovered the Post Boy coming down and running in towards the Arkansas shore. The usual signals were given and promptly answered, but in a few minutes it was discovered that the Post Boy was bearing down upon them by crossing over to the channel. Captain Fitzgerald, who was on the roof at the time, saw the danger and immediately ordered the engines stopped, which was done about the same time that the Post Boy struck her on the larboard side aft of the boilers, or in other words, amidships cutting almost into her hold, and ran down alongside and sank to her deck in about three minutes.

The Niagara had on board at the time between 250 and 300 cabin and deck passengers, including 120 colored soldiers, who had lately been discharged, and the scene that ensued when the collision occurred will never be forgotten by those who witnessed it. In the cabin there was less confusion than might have been expected, considering the large number of ladies, on board; they were cool and collected, much more so than the men, until the ill-fated vessel sank beneath the waves, and the heart-rending cries of the deck passengers arose from beneath their feet, and they realized the fact that hundreds of lives were being lost. Captain Fitzgerald and the other officers immediately set to work to cut away the cabin floor, in order to rescue them from their impending fate, and nobly did they strive, amidst that dreadful scene, at which the bravest stood appalled, as the floor was cut away and disclosed them struggling in the water, whilst the cabin resounded with their shrieks for help. Captain Fitzgerald and the officers, assisted by some of the passengers, worked with an energy almost superhuman, and only ceased when the turbulent waters had silenced every cry and closed over the lifeless bodies of those who had been so recently struggling in it. About fifty or sixty were thus saved.

The Post Boy remained along side and rendered all the assistance possible, in taking off the passengers, until the Kate Hart came up, and took the majority of them on board.

How many lives are lost is unknown, owing to the fact that a portion of the passengers returned to Helena, but the lowest estimate is seventy-five, principally of the colored soldiers, whose names are unknown, and probably will remain so. No cabin passengers were lost, and no baggage, except what was stored in the baggage room, which is under water.

Her entire cargo, consisting in part of two hundred and fifty bales of cotton, and a large amount of merchandise, was lost.

The boat, as we have before stated, sank to her boiler deck, and lies straight with the current, but it is feared that her hull is so badly damaged that she cannot be raised. She was a new first-class boat, owned by the Atlantic and Mississippi Steamboat Company, valued at $150,000, and insured by the company.

The passengers speak in the warmest terms of the kindness of the officers of the Kate Hart, who were unremitting in their exertions to render them comfortable, their boat being crowded with this large addition to a cabin already well filled.

A MAN CUT TO PIECES.—One of the most diabolical outrages that ever occurred in this section of Indiana was perpetrated near Edwardsville, in this county, on Monday. Mr. Denton Shirley, a well known and respectable farmer, was found in his barn in an insensible condition, with forty-three cuts and stabs about the head and face. In addition to this, his shoes and stockings had been taken off, his leg laid across a block and his foot cut off. We learn that Mr. Shirley is improving, and hopes are entertained of his recovery. If he should survive, he will probably be able to tell who his would-be assassins are.—[New Albany Ledger, Dec. 6th.

NEGRO TESTIMONY IN ALABAMA.—A bill has been introduced into the Alabama Senate, providing that in any case, in any court where a freedman, free negro or mulatto is a party, no objection shall be allowed as to the competency of the witness because of color, provided that no freedman or free woman shall be examined in any case whatever, except upon the witness stand, and in open court.

Interesting Information Concerning Chili.

The New York "Evening Post" of December 12, contains the following interesting account of an address on the history and resources of Chili, given by Senor McKenna, the special agent of the Chilian Government in this country.

"Chili has distinct natural boundaries in the Andes, the Pacific Ocean, the great desert of Atacama, and the savage plains of Patagonia; it possesses a homogeneous population, a varied but temperate climate, an immense coast line containing hundreds of ports and bays, which make access to the interior easy, a fertile agricultural region, which enables the nation to export breadstuffs, and mineral resources so rich that, besides coal, silver and gold, half the copper produced in the whole world, annually, is mined in Chili. Mr. McKenna then described the social and and political condition of his country. Chili has two millions of people, who form a republic in which a president is elected every five years, while the popular branch of Congress is chosen every three years, and the Senate for seven years. Taxation is trifling, the customs duties are light, and imposed only on articles of luxury; one-tenth of the whole revenue of the State is devoted to public instruction and in 1862 there were nine hundred and thirty-three free schools in the country, besides a university at Santiago, the most important in South America, and colleges in the different provinces.

Finally, lands are cheap, the climate is fine, the natural products various, the feeling towards foreigners very liberal, the undeveloped wealth immense, the railroads of the country so extended that Chili is excelled in this regard only by the United States, England, France and Germany, and the people are very favorably predisposed towards the United States.

The value of goods imported into Chili in 1864, according to the official statistics, was $18,857,363; and would any of you believe that in this commerce of which you are able to have as good a share as any other nation, while England is represented by forty-three per cent, the enterprising, the prosperous and active people of the United States, with their enormous, crowded and countless manufactures, stand only in the proportion of five per cent? But large is a fact, according to late offers three American European houses of commerce, only three American firms.

England has forty-three per cent, of the trade with Chili, France has twenty per cent. Germany, without a fleet and with only a few ports, has yet nine per cent., the United States, with California and Oregon lying on the same ocean, has got only five per cent, but little more than Brazil, which has three per cent."

SIGHTS FOR SIGHT-SEERS.—We notice that there is an attempt being made in England to get up a popular excursion, on a large scale, "from London to America, with a short tour in the States." Those who took the pains to peruse the speeches recently made by Sir Morton Peto and others of the English capitalists' party, and who observed the simple wonder expressed by them everywhere at everything they saw, can appreciate the profound ignorance of even the most intelligent classes in England concerning everything in America. These gentlemen had had large amounts of their capital invested in this country for years, had had it invested in the very way which of all others was most likely to make them familiar with our material characteristics and development, and, moreover, had been friendly to us during the war, and therefore all the more likely to be well informed about us; and yet Christopher Columbus was not more astonished by what he saw upon the continent of America in 1492 than Sir Morton Peto and party were at what they saw in 1865.

We think, therefore, that the "grand excursion" to America from London, which it is proposed to get up, is a most excellent idea for enlarging the English intelligence. It should extend as far West as was reached by the capitalists' party, (St. Louis); from there they might go down the Mississippi to Memphis, and thence by rail to Richmond and Washington. They would thus see about half of the chief-cities of the country, and would pass around nearly a quarter of its territory.

Between one and two hundred thousand well-to-do Americans have crossed the ocean this last year to "see the sights" and sovereigns of Europe. If a hundred thousand well-to-do Englishmen should, in the coming year, cross to this side to see the sights and sovereigns of America, they would be able to write about us for the London "Times" with some intelligence.—[New York "Times."

GOLD-BACK PAPER MONEY.—At last the Treasury officials have a paper currency that will circulate among the people of the Pacific States, who have not looked with favor upon the "greenbacks." The new "gold-back" notes, now being issued by the Treasury, are always to be redeemable in coin, and will afford those facilities in handling, counting, safe-keeping and transportation of which a metallic currency is susceptible. Their peculiar character, resting on the expressed faith of the Government, the provisions that they will be received for customs or redeemed in gold at the Sub-Treasuries, will cause them to circulate throughout the continent.—[Sac. "Union."

LITERARY RECREATION.—On the 12th ultimo, some of the Yale College Freshmen, while on a spree, removed no less than two hundred gates from their hinges. Some of them they smashed to pieces themselves, and others they threw upon the railroad track. Not satisfied with this they destroyed other property, and might have done other damage still had they not been arrested by the police. Four of five of the offenders were committed for trial.—[New York "Weekly Times."