The head waters of the Yellowstone, although occasionally visited by small parties of prospectors and mountain men, and being within a few days ride of the Union's forts, is still to the world at large a terra incognita, no person of eminence having ever passed through it on that side. Aside from any other consideration theickey Head on the Pacific slope, and surrounded by unbroken chains of mountains so approachable it appears difficult that any channel by a dense growth of timber, has ever been explored, under the auspices of the government has ever attempted to penetrate its fastnesses. The hearty prospectors, therefore, find their diggings there, whilst failing to find gold in paying quantities, but have always returned to repeat the tale of wonderful waterfalls, 1000 feet in height, of immense, cold, and springs containing an amy substance any of the kind on the continent and great tracts of country covered with the snow of snows, some of which are reputed to be in active eruption. But owing to the fact that this class of men had gained a reputation for indulging in flights of fancy when recounting their adventures, their reports were received with considerable incredulity until it was noticed that however much the accounts of different parties differed in detail, there was a marked coincidence in the descriptions of many of the most prominent features of the country. In 1867 an exploring expedition from the City of Salt Lake, after an unknown season (possibly for the want of sufficient money to engage it) came to maturity, the next year another was planned.
which must take the first - in talk, early in the summer of 1869, the newspaper throughout the state announced that a party would be sent from Fort Ellis.

Composed of some of the officers stationed at that Ellis of the most prominent and influential of the state, the party was accompanied by some of the officers stationed at Fort Ellis with an escort of soldiers. The head of the party was Major Benjamin. It was about the 5th of May for the Yellowstone, with the intention of making a thorough examination of all the wonders, which the report was said to abound. Judging from what he could learn by conversing with some that expressed their intentions of joining, the body of the article came to the conclusion that the party was to be composed of some of the most prominent men in the Territory, and being "a youth to perfection and a name unknown" he felt extremely flattered when his name was added to the list just given to the friends with his personal friends in getting an outfit and then looked with all the patience he could command for others to perfect their arrangements. About a month before the day fixed for starting, one by one the began to discover what pressing business engagements would prevent their going, and

previously mentioned some time to 10 o'clock. They came near from Fort Ellis that the military portion of the expedition was unable to join the expedition, which had been paid for by his party. It would be unsafe for as small a number to travel when there was a strong probability of
accompany with hostile Indians also abandoned the undertaking except the three friends before mentioned who were prepared to attempt the journey at all hazards believing that the dangers to be encountered had been magnified and trusting by myself and my two companions to avoid them.

On the 5th of July we started from Lea and City, a missionary town on a small tributary of the Missouri. 40 miles east of Hilleas and from this point I repaired from the diary kept by C and myself.

At 7 p.m. sunset a plain over creek 80 miles from St. City. Scene a haystack in the fore ground and few horses helping themselves to their supper a campaigner in the rear with all the paraphernalia of a campaigner out for scattered around promiscuously there unconscientious look. Individuals also scattered around promiscuously the long lathings of repulsive to the yellow town off at least but shorn of the prestige attached to the name of a score of the brightest luminaries in the social firmament of Montana at that instance, as it was first announced. It has assumed proportions of intense imagery and of no importance to anybody in the world except themselves. Our chance taking from friends who had assembled to see us start this evening was in presence in the highest degree and rather change with me. God by boys look out for you hear. If you get back that you will come out if. If you get into a similar remember I will not join you. It is the next thing to succeed to the meet the prancing pectoral that gleam in our cars as we just spake to our houses and left home behind.

7. Resumed our journey at & halted and arrived at the "Two Forks of the Missouri" at 10 O'clock. Here 63
a party of pioneers, solicitors for the future benefit of the public in general, and with an eye to their own property in particular, located the site of a town site which was to be the metropolis of the entire State. They were helping to plant on the eastern slope of the Rocky Mountains. It was here to maintain what I termed Colorado's a line of steamer traffic, built especially for the purpose.

To help between Colorado City and the falls of the Mississippi where they would connect with the Union

canal boats, the Capitol was an imposing edifice - a fact that was fortunate enough to make our town attractive. In 1878, we had our steam boat project in full effect.

With a waterlogged financial system, our efforts across the region for which we were charged the smallest drain, we found the resources, and it required a stretch of the imagination to connect Missouri from West with its imposing structure, the Capitol - which we had seen in pre-war years. Instead of commerce, we saw a turning with life and enterprise, as found in "the pioneers." They, not the exceptions to the rule by their being "baker." In 1865, we took a limited quantity of foodstuffs and other necessities on unlimited quantities to the whole lands of Gallia City and maintained an extensive.

From Gallia City a man of these became known as near Hamilton, and 24th near the center of Gallia Valley with an economy for the people.
From Hamilton to Bozeman, a distance of 14 miles, our road passed numerous reservoirs where timber in stacks of grain, or in fertile fields thickly studded with golden clusters, gave ample evidence of the prosperity of cattle. For cattle, the Banner of Montana, 25 cattle, if properly fed to the cow is a low estimate for the average yield, while as high as 60 or 100 cattle, his true frequent, his usual The present crop is unusually fine and there is probably what enough in Gallatin to alone supply the Territory with bread stuffs for one year. Of five crops, large herds of cattle and good land enclosed with substantial fences is any criterion of prosperity, and the glory, glory over of the prosperity of Gallatin, giving him no cause for complaint. I pay some of the farms in contrast with all kept farms, neat houses and spacious corridors for the accommodation of cattle as occasionally saw a farm where the fences were either burned or on its last legs, when a few scattering cattle ran mounted before the door of a rough log cabin, when the major share of grain, and a patch of half-stunted crops, without the shade of their logs, clinging and spreading of human they grieved the other, a class of men to whom the corn field, or "John Brown" paid as just a tribute.

Bozeman, a thriving frontier town is beautifully located in the eastern part of the valley. Infrastru
It had been recently visited by a party of the N. P. R.R. for the purpose of making a preliminary survey of the Dogman Pass, the lowest pass in the divide between the waters of the Yellowstone and Missouri, and who having decided upon the feasibility of the route had made every preparation and the belief that the road would be built at mid next day, and that a brilliant future awaited everyone that owned land lots in that territory.

9. This being the last place where supplies can be obtained, we spent the forenoon in making such additions to our supplies as we deemed necessary for a week's trip and our outfit when completed consisted of 175 mg. flour, 25 lbs. of beans, 10 lbs. of ground coffee, 10 lbs. of salt, 10 lbs. of sugar; 1 bag of trusty potatoes, 1 small camp kettle; 4 cans of pemmican, 15 lbs. of a pound of coffee to the salt to the dried meat; 1 small camp kettle. 1 Coffee press, 3 frying pans, 3 tin cups, 3 tin plates, 2 knives, a fork, 3 sheets of ammunition, and fishing tackle, 5 hard blankets & buffalo robes, a first-aid, first aid, and a small field of collected together looked like a for unadulterated beef for two or six hours, but Billy who had earned an apprenticeship in a pack train, and was expert in all the mysteries of the art in the wild, for country, took charge and soon arranged them in convenient packages of smaller compass than I could have believed possible. The brand is double barrel shot gun for killing small game which will be carried in one of the packs in such a way that it can be drawn out in a moment without loosening the least rope. Each gun is carried in a Repenting rifle; a Cobb pocket shooting-arms bag, and a sheath knife, in one about 20 rounds without reloading and billeting in a fair field, or an open one, a match for any band of hostile Indians that there is any like better of meeting.
C. Who has been duly elected Captain to serve during post duty, and a pair of field glasses are placed in his office. B having in former days been a sailor, is experienced and gentlemanly, and carries his balls of black and for looking up up specimens taking sounding at
S. Some carried a conveyer chain two days and supposed to have a practical knowledge of topography, as I late charg'd the department, and carry a small pocket compass and thermometer. Having completed all our necessary
we set a final adjourn to civilization, and deciding it necessary to keep some system in traveling we decided that
C should lead the men, then came the two post horses
while B and I should remain the rear, act as men
guards and soon strictly enjoined Sherman, Druggy, and
to use every precaution to guard against surprise.
From this point we turn this over throughout the journey as what
we think proper to change. To 20 miles from Began we passed Fort Ellis and we think whenever located the
first displayed strategic letters of a high man
for an Indian would have the firmness to attack at or near the settlement and usually
being close to Began: it is very convenient
for the poor soldiers to exchange their blankets for whiskey and all the other little necessities to
necessary b twin happiness. We camped early
4 miles from the Fort at the foot of the range. Besides
party of Crow Indians are frequently seen in this
vicinity and are taken on an in men danger but
than be still be when an yet farther away from the settlements. The selected our camping place on a piece of high ground away from underbrush and afforded the horses to graze well, as we had and them protect them from the reds but our tent up when they came in, the dog would give the alarm of anything approaching.

10. The fire was raised up at daylight by a smoke which was probably in his way to look for water, and was standing some hundred yards away expressing the astonishment of one observer by making a noise that sounded like a cross between the equally a pig and the note of a wolf, perhaps it is useless to say this surprise does not entirely on his part. Here left up his arms and made an unsuccessful attempt to cultivate a warm acquaintance with the horse, but this wish went unheeded, but soon carried him out of sight. He got an early start and took the trail leading up the creek which is one of the tributaries of the Easton Fork, and in a short time found ourselves traveling a steep bank bound over on the left by a perpendicular wall of Talus in line with a flat top which in the right the mountain was in steps or terraces caving in larger and distant aspects, with the interesting views around with a clear, grassy, open space, the grass followed the mass of dark green foliage was unbroken from beet to summit, at others it was broken by building of fantastic shapes or characteristic of the Limestone formation.
On one of the highest points stands a huge rock that bears a strong resemblance to a giant's chair. The rock is covered with moss and lichen and is slowly yielding to the ravages of time, but the stout old boulders stand at a ledge against the sky to make every approach a perilous one and seem as though they might never wear away or crumble away, it was the stronghold of some brave of feud-al times and he even his retainers standing fast with the spirits of a successful foe.

As we approached the summit the forest appeared only in patches and the rocks on either hand rose abrupt and open with a broken girt of rough grey stones offsets from foot level for the headlong bounds of antelope in snow. Immediately after attaining the divide we struck the head of Ford creek and followed it down in an easterly direction to where it debouched from the foot hills into the valley of the Yellowstone. Here we turned in a southerly direction over a low rolling plateau arched with forested valleys which are broken in parts with fire through which we horses jogged past them every way and among it the river at first unseen. The valley is about 25 miles long varying in width from 12 1/2 miles at the foot to the mountain elevation in a valley side forming a canyon below which is the Yellowstone valley proper. At the Bridger fork a partly frozen river to a small stream which rises in the mountains an
The east side and empties into the river opposite our camp. This has never been known as Emigrant Gulch. It is "prospect" hill but it is deep and the level rock has never been worked in a practical manner and more than one poor digger's veins of fortune has vanished in thin air before the sharp realities of its boulders and quick sands. A small party is still clearing away and are proving their facts by their words, they are removing a drain ditch and are now down between 60 and 70 feet with no signs of lost rock. The mountains on that side are very precipitous and Old Emigrant, a sugar loaf peak of the highest in the range. Distance travelled to day 35 miles.

II. Started late with the intention of crossing the river and taking a look at the mines, but we missed the trail that led to the ford, and after traveling 5 miles came to a ravine and stopped to examine the way, but found no one at home. A casual survey of the premises satisfied us that whoever had taken up the mine at the time left no clue. Frequently found upon our frontiers that lack life easy. A cabin without any sign of occupation between the logs with a very through which an old logging crew would follow for hours after he had believed nothing. A chain from a cart for a churned. A small stack of which to which a dozen heads of cattle had previously been resorted from an impenetrable field of 40 acres or more, well supply them with the stuff of life. Provided it is not all destroyed before they find time to thresh it. A pole and the rock miles proved that they dispensed within the mile.
for a short distance we concluded to remain on the west side of the river, and as it was threatening to rain we started from a timbered creek 3 miles above which we reached at 2 P.M. but not until the storm commenced, and we were thoroughly wet. Having no tent an umbrella made on by suspending a rope between two trees over which an pitchers a pair of their feet piercing the ends to the ground, whether this is usual or not, our efforts, ourselves and with them, and tried to make a shelter between the same very comforting situation but if their noses and chilling with an any hour to the contrary we were not to keep comfortable at all. About the middle of the afternoon it stopped raining and before the general glow of a rising sun we soon dried our clothes and forgot how unpleasant in the cold drizzle of an autumn storm. Among the things the Yellowstone is famed for its beauty towards evening I started out to try my hand at fishing and in a few minutes succeeded in landing an splendid fellows whose of good weight could not be less than 12 lbs and before they were fairly done flapping we had both of them in the frying pan cooking for supper.

12 The bad frequent showers during the night but it cleared up a little after sunrise and by 8 o'clock we were in the saddle. The valley gradually narrows in as we ascend and executes 12 miles above our last camp. At the upper end of the
valley the river received a small tributary from the east and upon arriving them to its mouth some ponies grazing on the east bottom a small rising from the alluvial that skirt its banks. Here we found a wakings inhabitant by two old squaws who were engaged in gathering and drying wild cherries. They had seated on the ground with a smooth flat stone between them upon which one would place the cherries while the other crushed them with a round coulter. They had two or three mandibles drying in the sun spread out on old rags and lots of hide. Everything around them indicated the wakings object for they wakings was found by placing a few poles in a circle of not more than 2 per cent in the cherry. With these long sticks outstretched in the usual manner, there was no trouble with grass two or three feet from the ground but were up at the lip, they had no building except the rags upon which the cherries were spread, not a single utensil for cooking was anywhere to be seen and so far as we could see over the cherry was their only means of sustenance. He spoke up and related them by the customery, how he cooked they returned no answer and manifested no surprise at our presence but after a prolonged stare resumed their occupation. As we turned to leave the oldest came out and commenced talking in a guttural that was unintelligible to us. She seemed desperate to communicate some intelligence for she repeated the same words.
several times, turned up the river and continued
up the rocky or steep and closing the hands them times
the only word we could understand was togy which
in the Danwook language means mountain ship
and is the name of a band of white men called by the
white trackers. Anything in human shape
more equalled than the rising sun it could
be impossible to conceive. Her grey hair hung
from her low narrow forehead in a tangle over her
blood shot, the shame from her cavernous eyes
and the desire from her blithe less mouth ran down
the gashes of her withered cheek and father jaw.
her empty arms were beginnent with a dart to
slow shaped hands were stared with the purs
if her eyes and the other seeking wrist put the thing
served her for letter an unveiled rather than
concealed. The bitterness of her face, the brand
away with clothing and disgust and one
wishing to stop contention in her pecuniary upset
up through the Clammy. Here we found some
very rough travelling and while clambering
over the rocks started a herd of antelopes
finding themselves hemmed in between us and
the mountains they attempted to escape by
dashing past us. Then I fired two shots each
from our rifles without effect but they ran
to close to the Clammy that he knocked one over
with the shot gun loaded with a light charge
of gun shot. He sampled close to the river in
a narrow bottom and found compactly
on an uphill stick and tried faith from the water.
A traveled 6 miles a day and in following the general course of the river for the first 22 miles it turned N. E. between 2 miles and crossed a stream of considerable size coming from the South. A small part of the same to make it easier when the mountains rose as precipitously we were obliged to climb the river banks and often an hour's hard climbing reached the summit of a high plateau, and then afterards camped near a small stream with sand and convenient and fine grass in abundance. During the early part of the day in some fragments of hills to cross deep ravines or places where the hills terminated abruptly by the river's edge. The river here with me and often by the base of the mountains on the west side, above low hills or a narrow beach between it and the foot of the range on the east. Our road today had been across one and in an ingriasing landscape which of the country from travelling over an irregular surface of mountains country, where the ever changing panorama of mountain scenery is different from anything we have ever seen before. The general features of the country presented many points of interest to the geologist. It can show an entirely a slate formation having a certain depth in which the slate would be laid. It passed through a hill which in crossing away had left two smooth undisturbed hills to east and west, and from the foot in height, they were about 60 feet apart and ran parallel to each other as though as a level from the bottom to the top of the hill, the space between them presented the appearance of a well traveled road. This is a beautiful formation, as seen the banks of elk deer and shrub in great
abundance and for several miles were nearly
out of sight of antelope, but as we had just
must enough to supply our present needs we did
not attempt to shoot any.

14th Soon after starting this morning we crossed a low
ridge and as we were descending it discovered an Indian
fanday moving a herd of some 20 or 25 horses towards
a clump of willows from which the smoke was rising.
It was evident he had seen us and was trying

to avoid giving notice of our approach. He called on
the sentry and called a general of our face. We ran
out of sight and called a general of our face. We ran
expecting to meet with Indians here and thought it
ought possibly in a war party. Knowing it would
be impossible to avoid them we decided to make
preparations to give them a warm reception in case
they made any hostile demonstrations. We exchanged
our pistols, tightened the strings of our saddles four new
caps upon our revolver, filled our bullet pouches with
cartridges for our muskets and putting on a broad front
started forward, making a slight deflection to
the left in order to drive them as possible. In a few
minutes the two of them came fluttering over the prairie
and on coming up proved themselves to be Tomkups
or Redskins and friendly. They released our mules
of some after having and we exchanged the comple-
ments of the season and made such inquiries as their
limited stock of English and our knowledge of pantomime
would permit. It was curious to notice how quickly each
of our party divested his military passion. The Captain
has the reputation among his friends of being a ladies
mean seeming of they had any engage of them except B is got speculation turn of mind and wanted to "hunt" something and the geographical engineer who purely himself on being a sportsman could to know if there was much game in the country and what best they had in hunting.

They informed us that there was a party of thirty lodges of Indians within eight days ahead, so this was the price of intelligence. We heard them start to convey to us the day before yesterday. The chief and chief of their camp and one of them took a companion as porter for fur bundles big gun for expression, ammunition, and matches. In several hours we travelled on a high rolling table, first discovered by thinking takes postwagen, rocks and beautiful groves of timber. Two or three miles to our left we could see the dark gorge through the mountains which the river had cut flowing westward. As we descended from the plateau we struck a trail which had recently been travelled by a large party of Indians and as we followed it all we had with the teams at the head of a canyon, but we continued for the new trail through which the trail was cut. The river has resumed its northern course again and from the hill today we could trace the deep channel through which it flowed for many miles to the Santa Fe line. The parallel ranges of mountains had seen to be covered with dense timber.
From the best information we have been able to gain in the time it is one continuous canyon from here to the falls, a distance of 25 or 30 miles, through which we on had ever been able to pass. The shall cross here and follow up the last branch a days track, then turn in a S W corner and try to strike the river again near the falls. 

Just below our present camping place is a canyon 3 miles long and while passing around it yesterday we caught glimpses of scenery surprising in grandeur anything we have before seen. So concluded to lay over one day and give a more thorough examination than our limited time last evening would permit. We had breakfast by day light and thinking it would be unsafe to leave our horses unguarded it felt to six o'clock to remain in camp with the understanding that C and B should return early and give us an opportunity to enter the canyon in the afternoon. For a while I busied myself by collecting wood, attending to the horses, and writing up notes. Then I thought I would drop a line to the dangers of a deep ford hard by, and truly my lines (a log about 10 feet long) fell on a pleasant place) at 2 1/2 mile I had more true stream about on the bank than I knew what to do with.

With two of the largest some potatoes and bacon I escaped a cholera with such success that after we had completed our dinner our camp kettle screamed up an effusion of hot amazed potatoes or their to our hungry hearts. Jack Spratt could not eat for his cup could not be taken. So between them with the pot and the plate and both the bigger clam.
In the afternoon 13 we left camp and the
expedition moved up the canyon. We climbed the bluffs
keeping away from the edge of the precipice
until we had traveled about half the distance
between the head and foot of the gorge. Close to
the way out is the edge of a terraced plateau and in
a moment we were standing by its edge upon the
edge of an overhanging cliff at least 700 feet in height.
Language is inadequate to portray the scene that
burst upon my sight. The upper bluff was abrupt
on a line with the plateau where we were standing
and maintained this height for a mile up the canyon.
But gradually sloped away towards the foot of the
canyon. The upper half presented an unbroken face
with here and there a prominent angle but everywhere
maintained its perpendicularity; the lower half was
composed of the debris which had fallen from the
cliffs and formed a subtle against the encroachment
of the river; but the most singular feature was the
formation of the wall; at the top there was a stratum
of grays, boulders from 30 to 50 feet standing in
pyramids and columns; beneath that a bed of conglomerate
50 feet thick composed of wasted gravel and boulders
then another stratum of columnar boulders of about
half the thickness of the first and lastly what appears
to be a bed of coarse sandstone. About this area
there was a monolith or pyramid of conglomerate, angular in
form which we estimated to be 40 feet in diameter
at the base, 300 feet high diminishing in size in a
cone shaped to its top which was not more than 5 feet across.
It was evidently destined as a temple or temple could
How it was formed is quite other in
composition. We could see the river from above
steadily for nearly the whole distance through
the canyon, now clashing over some minor cataract
conflicting against large boulders that seemed
to have been hurled by some giant hand to delay its
progress, and avoid scouring at great eddies beneath
the dark shadows of some projecting rock. The water
is so transparent we could see the bottom from there
an even slanting even when it was several feet in
depth, and has that peculiar limpid turquoise hue
characteristic of our mountain streams.

On the left bank the wall is broken down in many
places and cut by transverse narrow running
teers into the hills, the cliffs on this side are covered
by a lowly growth of lichen which spreads down
the slope to the bottom whereas there was not enough
for this before. At half mile down the river
and near the foot of the bluff was a chalky looking
bank from which steam and smoke was rising and
on approaching to the spot we found a vast number
of birds sulphur originally more of them than very large
amount. The smoke was arising from every corner and
hole in the rock and being highly1 unpalatable with
sulphur it throws off sulphuric acid gas, making a
smell that was very unpleasant. All these creatures
were...
27 or 10, but in sight. Smoke is still rising from the earth in one place from which a considerable amount of hair brook is discharged within a few days in looks of fire. While we were standing by several minutes with nothing but smoke and an explosion upon the earth, in both points of the fire and brought away, which proved to be sulphur. The fire

example of a man ready armed, when ignited, to press on the place, I carefully pitched my way carefully to the ground, where the smoke and

ground support and the wall through the hot, with the most of them, and then had to empty the

dangerous part of my hand, and yet the best portion of it was lying in a burnished

piece, one foot through the court formed by the explosion of sulphur across the top of a

crossing, and with a second gun in the other, a

heading chamber, which could not get in, in a

lack of the rest of the fire, being driven by the flame and

time the hole by throwing the necessary metal in the

down from the hole, and in concluded that a great fall with

hole would have reached the fire, much to the

He shook very coldly considering the burntime,

and not on collecting specimens for his cabinet—although

nothing had happened, and many had come up to look

at the explosion of sulphur. But the death of John

Smith is not lasting, and further to my surprise, but as if I should have always had a

perilous, in the spring, more than I could lift the

hurt of him and lifting them out.
The deepening shadows admonished us that the afternoon was waning, and as we had another place of interest to visit, we reluctantly left the spring, climbed the steep cliff again, and returned to the head of the canyon. Here a stream of considerable size that rises in the mountains away to the west goes down along the bed of a deep ravine over a succession of cascades which waxes in height and beauty, and culminates in a perpendicular fall of 133 feet. Thence flowing between mellite walls which taper off towards the main it finally strikes out in a swiftly flowing current and winds up to the rock wall at the yellowstone. From this point we followed up the ravine to the foot of the falls. Here we found an amphitheater hollow in shape, some 60 feet in length by 200 in width, enclosed by a perpendicular or precipice wall between 200 and 500 feet high. The rock here is a coarse reddish tuff, and the rock of disintegration is actively going on: continuously there are sharp angles or step-places on the sides, around the falls was a mound with ledges which being constantly wet with spray gave the well the appearance of being illuminated green of the closest hue. About half way up the side the stream breaks to thrust out of the side of the wall and falls in a hold of spray into a deep pool. But as we were approaching it we noticed our steps down the ravine and by turning we arrived a little after dark bringing our book.
Brach. Here the mountains rise leaving a beautiful valley 1 miles long from North to South. The railroad to enter Bright and at the upper end enters a forest of heavy timber cuales which the pedes slant 4 miles and camp on an open glade. Here for the first time I experienced a feeling of loneliness. Our field of vision is surrounded by the narrow limits of a few acres bounded by a dense forest of stumps and stumps from the timber depths beneath our sound across the mountain singing of the wind through its branches. As twilight approaches, the trees of the night break upon the approaching stillness, the early scene as quiet and the annimalatitude of his howl and whine the sleeping forest adds to our sense of solitude. The roar of the mountain train awakens the sleeping echoes of the adjacent cliff, and we hear the elk bellowing in every direction, but perhaps even these are unusual sounds and are now raised in protest against the approach of the common enemy. The leaves seem filled with a feeling of dread, the grassing and sound their labor to listen and then howl—

7. It rained a little during the night and the morning the sky had one cast and had every appearance of a approaching storm but as the grass was very poor in density it necessary to move camp. Six miles had travelling over steep ridges and remaining routes brought us near the summit.
of the season between the foots of the mountains when we found all the supplies for camping, plenty of wood, water, etc., and as the storm was about to set in we took shelter beneath some large trees and pitched our blanket tent and protected it by thick brushes on its windward side. It commenced snowing about 12 but it melted as fast as it fell. The storm continued during the afternoon but we were well prepared for it and got along nicely. The poor horses suffered though and we were obliged to pick them up to prevent their running away. In the evening we tied up and parleyed from the tent, with our other supplies.

18. The snow fell in camp all day. The storm still continued, and there was a heavy snow on the ground. The situation began to look desperate.

19. It was clear and cold this morning but the sun shone brightly in the promise of warmer weather again in a few days. Upon reaching the summit we got an excellent view of the surrounding country to the eastward, as our path lay the little valley of the east just below the line of snow and apparently in another channel. The snow-capped peaks of the Big Horn range beyond glinted like burnished silver in the sun light, and contrasting them in the dim distance the Three were mountains seemed to blend with the few flickering clouds that skirled their lifts in the air. After reaching the summit elevation, as far as we could see mountains and valleys were covered with timber. In contrast with the barren, snow-capped peaks behind us, the dark green forests disappeared in line as it receded, till it merged at
On the horizon in a boundless black forest
In several places eastwards to the southward
we could see dense clouds of steam rising above
the landscape, indicating the location of numerous
hot springs. We took the bearing of the place where
we supposed the falls to be and shaped our course
towards some of the largest springs and
eagerly started forward. Down the western
depth and entered the forest. The snow found
travelling very difficult, for in addition to a rough
ground we had to cut our way through fallen
trees, tangled and interlaced with underbrush,
and these sometimes an hour in travelling a mile.
It got later towards noon and there we made
terrific progress. About the middle of the
afternoon we came to a small stream of clear
water running in a N N W direction. Our horses
appeared to be thirsty, but an indication that our
relief of the water seemed to satisfy them, the
mystery has been explained for upon trying
it ourselves we found it had an astrigent, sub-
acid taste like a mixture of alum, orange,
and water. This made further on to find good
water and camped. We have had a hard day's
brand and only made eight miles.

20 An hour after starting we came to a gentle declivity
at the head of a shallow ravine from which the clear
water in a hundred columns and channels in a cloud
emerged as to obscure the sun. In some places it
spurted from the rocks in jets not larger than
a poplar stem and in others it coursed gracefully
up from the surface of boiling pools from 5 to 12 feet in diameter. In some springs the water was clear and transparent, others contained a brown悬浮 that they looked like pots of boiling paint and one of the largest was as black as ink, with the center being in the rocks in the center as its long and 2 feet across in the widest point of the surface but enlarged as it descended. The ground water was on the bottom of a bottom that the could not be looked down to any great depth on account of the steam, but the ground extended beneath our track with a bottom 3 feet and we could hear the water running below, sending up a dull rumble. The weight of water like the back of the ocean surging up a case. At these springs but little water was discharged at the surface, it seemed to pass by some subterranean passage. A half mile down the river it broke out again here the springs were in groups spreading out over several acres of ground, one of these groups a collection of mud springs of various color, situated on the left bank, slope of the river—was composed of clay and strawy mud, as it was discharged from the lower side gave each spring the form of a basin or pool, at the bottom of the slope was a 10 to 30 feet when all the ingredients from the spring above was united, and surrounded down to a nearly greenish yellow compound of the consistency of mossy pudding. They could further on be found from hot springs along the side of a deep ravine off the
Bottoms of which flowed a creek 20 feet wide. Near the bank of the creek, through an aperture four inches in diameter, a column of steam rushed with a deafening roar, with such force that it maintained its rage for half an hour, then spread out and rolled away in a great cloud towards the heavens.

He camped near by and spent the afternoon in examining the Springs and many other springs about the place. He found unanswerable proofs of sulphur and salt-petre. Sulphur is also abundant; a small point in the vicinity some springs long and helps to boil contained as much alum as it could hold in solution, the water being the same as in the falls.

Our supply of fresh meat was getting low, so towards evening I went hunting and succeeded in killing a fine elk within a mile of camp.

21st A pleasant ride of 11 miles over an undulating country covered with a small growth of scantly brush but no underbrush or fallen timber. Brought us to the traverse two miles below the falls. Regained a distant view of them but then being too press convenient camped an up the river 1/2 mile above the upper fall and camped on a narrow flat close to the main bank.

22nd The speck of the falls, a day that has been a succession of surprises and an retire to camp, realizing as we never have before how utterly empty our minds are in wise against efforts when compared with the fulfillment of the omnipotent will. Language is inadequate to convey a just conception of the awful grandeur and sublimity of this masterpiece of nature's handiwork. In any description I shall
confine myself to true facts.

Above our camp the river flows in a clear and gently smooth valley, between gently sloping banks, but just below, the hills are tall and in an Easterly direction the land falls away in a narrow channel through which it burns with increasing speed and rushing through a chute 60 feet wide, it falls in an uninterrupted sheet over a precipice 115 feet in height. It widens out again and flows two steady paces for half a mile between steep terraced cliffs 40 feet high and again narrowing in, it is not more than 75 feet wide. It makes the second drop of 35 feet. The rugged edge of the precipice comes off level with the river and a thousand streams all come together and yet separate (changing it to the appearance of another silver) the outline of the river as a sign as they increase in velocity, curl and eddy and back and forth along before they reach the bottom. Their current of mist entices the river for 250 yards but it clears out again from beneath the rainbow arch that spans the chasm.

There were a succession of rapids and cascades as we ascended at last on a water course seems to bring the rim walls of the canyon together. Below the falls, the hills gradually increase in height for two miles when they assume the form of the posts of a mountain. Here the Canyon is at least 1500 feet deep with an average width of twice as much on the sides. One third of the distance downstream the walls are perpendicular from the river running down to the water in steep ridges that are covered by growth of the most precious grass and color, and it supplies an expanse of the
Undertaking to explore a few of the castles, watch towers, and other ancient structures of the region, we walked up the river, passing a number of small islands, and looking back upon the town from the opposite shore, we perceived the town was situated on a point of land, with a small river flowing by it, and the houses built upon the bank, with a steep ascent to the main part of the town. The town was divided into three parts, the first being the old town, the second the new town, and the third the country town. The old town was built on a level spot, with a small river flowing by it, and the houses built upon the bank, with a steep ascent to the main part of the town. The town was divided into three parts, the first being the old town, the second the new town, and the third the country town.
Winchester rifle by taking a long stick or a fork of  
green standing in a sand bed on the opposite side of the  
river and placed one by a quick succession  
the smoke from camp we found a foot and entered  
over to the left bank to view some little espers on the hill  
aside from the river these were longer than any we  
had seen before but two of the same general character  
and our present camp a came to another collection that  
didnt now more than a jessing notice then like the  
most in how done an extended espers with bull and as  
we approached when we could see the planes many  
peacocks on the other side from 15 to 20 seconds accompanied  
by a dull explosion similar to the discharge of a black  
underground. These explosions came from a long con  
trolled ran back on the hill from which sound had been  
discharged in such quantities as to form a heavy black  
smoke in front of that 20 jet higher than the floor of  
the can which prevented the smoke from flowing off but  
the escaping steam had kept a hole open up through the  
mountain and smoke in front of the entrance 20 jet in diameter  
the can simmer nearly filled with smoke and the steam  
flows came out each from and volume that it could  
apart the whole mess against the roof and ascend it out  
into the open space in front and then as the cloud would  
help us could go insettling back in lushed words into  
the evening again. Our camp was half a smoke away from  
us and yet we can distinctly hear every explosion and sound  
explosion we can feel the ground from beneath beneath  
our feet as it does at each settlement in 14 minute  
and 30 minutes.
and cave is another that first caught our eye.

The entrance is in the form of a perfect arch, 10 feet in height by 5 feet in width and maintains this size as far back as we could see. The floor being covered with light to the height of several inches prevented our inspecting it. A short distance below these caves were several large sulphur springs, the most remarkable of these was a shallow pool 15 feet in diameter in which were rocks on one side and yellow mud on the other was gently trickling without stopping.

On the morning of the 18th we went to the angle bank and by eight miles brought us to the Yellowstone Lake.

The main body is low and long from S. W. to N. E. and bounded from N. to S. but at the south end it forks out in two arms one to the S. E. and the other to the S. W. making the entire length about 32 miles. The shores add to the beauty of the lake, the steeping mountains held prominent views of snow-covered peaks and many small islands which are also steeped in snow. The water is clear and at the extreme, the following along the North Shore, 5 miles and camped on a point of promontory at the termination of the North arm. From hence to the east of us at the foot of a rocky bluff we can see rising from a great number of hot springs, some of them apparently at the waters edge. The shallow water in some of the caves afford pretty ground for thousands of water fowl and we can take our choice of ducks, geese, blackfeet, pelicans, etc. The supply of provisions is getting low which causes us that we must soon leave our shelter and travel home and we have decided to follow with the best show to the North, the lake and then turn to the N. W. cross the range and try to find the Washburn and follow it down to civilization.
Standing on the lake shore we could see schools of trout but they would not come within reach of our short tackle as Billy took the cork went into the timber and cut a lodge pole pine about three inches in diameter at the butt and 34 feet long. He then drove a forked stake in the sand, made a loop of a piece of rope which he lay on the fork and put his pole through the loop leaving enough of the butt of the pole on the shore side so that he could balance it by pulling a considerable of his own weight on it, he tied a fish line on the end of his elbow baited the hook with a piece of fresh meat. Drawing out and dropped the hook which had no sooner touched the water than it was caught by a large trout whose toes instantly caused and revolved action in a short time he landed more than we needed and with these and our last potatoes we made and ate the first fish dinner ever cooked in these parts. Billy had one more adventure here which gave him a surprise at one point quite a large stream of hot water from the spring flowed into the lake and as the water in the lake was very cold Billy thought so much hot water would improve the temperature and make a nice place to take a
both, so he stripped off, ran down the sandy slope and took a flying leap out into the lake, as he struck the water he let out a yell and aain adtaken with the longest jumps he could make, he had one or two real deeps around each leg from the last water which was all on the surface.
We made an earlystart, hoping to get through the heavy timber before night. At first we followed the lake shore but we found it so winding that we were losing time in getting ahead so in trial short cuts to avoid the points, but the fallen timber was bad in places that our canoe was even more crooked than the shore line. I was riding as usual in the canoe.

From Badger, the nearest post canoe in the timber that our kind—farmers side post against a dead tree and knocked it down. I heard a shout of "Look out" but before I had time to look away the top of that tree landed on my left shoulder and something snapped: fortunately it was only the tree top, after a brief examination the boys reported, no broken bones and Pete the son of Deacon assured me "it isn't so worse as it could be."

"Pitch darkness" wrapped us where there was neither grass or water and we concluded a dry camp might not be the worst in the world though it was the worst we had ever seen.
The canoe on the water at day-light and reached the lake again in about two hours when the Louise apparently tried to lower the surface of the water but whether they succeeded or not they took so much aboard that they could not travel comfortably on. We had disposed their things on the back of the canoe where we could see and reach the back of the lake above the line where we found good grass and for decided to stay over the day to rest ourselves and the horses and to view the many objects of interest and wonder (following page)
(after sleep out among the licks)

The next day we crossed a range of hills and made camp in the midst of a blinding snowstorm. Some of our men were killed and nearly all the rest were injured. We then cleared snow off the ground and moved on through deep drifts and over steeply rugged ground. A long climb up a mountainside led to sleep for the few hours to carry us, demand that came to rest.

From the summit we went down the western slope and about the middle of the afternoon came to a small (or from printed copy)