

THE RED CLOUD CHIEF.

BORIN & SPRINGER, Eds. and Prop.
RED CLOUD. NEBRASKA

THE BLUE RIDGE.

In the early autumn of the year 1849, in about half an hour of sunset, I drew rein in front of a large double-log-house on the very summit of the Blue Ridge Mountains of eastern Kentucky. The place was evidently kept as a tavern—at least so a sign proclaimed; and here I determined to demand accommodations for myself and servant, Bose, a dark-skinned body-guard. Bose and I had been playmates in childhood, and I need hardly say that the faithful fellow was attached to me, as I was to him, and on more than one occasion he had shown his devotion.

There had been a shooting match at the Mountain House that day, and as I dismounted, I saw through the open window of the bar-room a noisy, drunken, and evidently quarrelsome set of backwoodsmen, each of whom was swearing by all possible and impossible oaths that he was not only the best shot, but could outfight, outjump, outwrestle, run faster, jump higher, dive deeper and come up drier than any other man on the mountain.

"I say, Mars Ralph," said Bose, in a low tone, as I handed him my bridle rein. "I don't like de looks ob dem, in dar. S'pose we go on to de next house, 'tain't fur."

"Nonsense, Bose," I replied; "the fellows are only on a little spree over their shooting. We have nothing to do with them, nor they with us. Take the horses round to the stable, and see to them yourself. You know they've had a hard day of it." And throwing my saddle-bags over my shoulder, I walked up the narrow path to the house.

I found, as I have intimated, the bar-room filled with a noisy, turbulent set, who one and all stared at me without speaking as I went up to the bar and inquired if I and my servant could have accommodations for the night. Receiving an affirmative reply from the landlord, a little, red-headed, cadaverous-looking specimen of clay-eater, I desired to be shown to my room, whither I went, but not until I had been compelled to decline a score of requests to "take a drink," much to the disgust of the stalwart bacchanalians.

The room to which I was shown was at the far end of a long, two-story structure, evidently but recently added on to the main building, which it intersected at right angles. A gallery extended along the front, by means of which the rooms were reached. I found my apartment to be large and comparatively well-furnished, there being, beside the bed, a comfortable cot, half dozen split-bottomed chairs, a heavy clothes-press and a bureau with a glass. There were two windows, one along the side of the door and the other in the opposite end of the room. The first mentioned was heavily barred with stout oak strips—a protection, I presumed, against intrusion from the porch, while across the latter was a heavy wooden curtain.

In the course of half an hour, Bose entered and announced that the horses had been attended to, and a few minutes later, a bright-faced mulatto girl summoned us to supper.

Supper over, I returned to my room, first requesting to be aroused at an early hour, as I desired to be on the road by sunrise. Thoroughly wearied by my day's ride, I at once began preparations for retiring, and had drawn off one boot, when Bose came in rather hastily, looking furtively over his shoulder, and then cautiously closing and locking the door.

"Mars Ralph, dar's going to be trouble in dis house afore mornin'," he said.

I saw in a moment that something had occurred to upset the faithful fellow's equilibrium.

"Why, Bose, what is it? What do you mean? I asked, barely restraining a smile.

"I tole you, Mars Ralph, we'd better trable fuder," was the rather mysterious reply. "You see dat yaller gal dere tole me dar would be a muss if we stayed in dis 'doubled ole house all night."

By close questioning I elicited the fact that the girl had really warned him that four men whom I had noticed talking together were a desperat set of villains, and probably had designs on our property, if not our lives. The girl had seen two of them at the stable while I was at supper, and, by cautiously creeping into the stall next the one in which they stood, had heard enough to convince her that they meant mischief. Subsequently to this, she also saw the landlord in close confab with the entire party, and from his actions judged that he was urging them on to their nefarious work.

"I tell you, Mars Ralph, dem white trash ain't arter no good—now you heard me," persisted Bose.

I had begun to think so myself; but what was to be done? The situation was full of embarrassment, and I felt that nothing could be done save to wait and watch, and, by being on the alert, defeat their plans by a determined resistance.

I found that from the barred window, in which there was a broken pane of glass, a good view of the stable could be had. Then for the other window. I crossed the room, drew aside the heavy curtain, and, raising the sash, looked out. A single glance was sufficient to cause me a thrill of surprise, and I gave a low exclamation that instantly bro't Bose to my side. Far below I could see the faint glimmer of water, the low murmur of which came indistinctly up

from the depths, while on a level with that should have been the ground, I dimly saw the waving tree-tops as they gently swayed before the fresh night breeze, and knew that the window overlooked a chasm, the sounding of which I could only guess at. In other words, the house, or that portion of it, was built upon the very verge of a cliff, the solid rock forming a foundation more lasting than any that could be made by the hands of man. I leaned far out, and saw that there was not an inch of space left between the heavy log on which the structure rested and the edge of the precipice; and then I turned away with a full conviction that if escape must be made, it certainly would not be in that direction. There was nothing very strange in this; there were many houses so constructed. I had seen one or two myself. And yet when I drew back into the room, and saw the look in Bose's dusky face, I felt that danger, quick and deadly, was hovering in the air. Without speaking, I went to my saddle-bags and got out my pistols—a superb pair of long double rifles—that I knew to be accurate anywhere under half a hundred yards.

"Dar' dem's what I like to see," exclaimed Bose, as he dived down into his own bag and fished out the old horse-pistol that had belonged to my grandfather, and which I knew was loaded to the muzzle with number one buckshot. It was a terrible weapon at close quarters.

The stables in which our horses were feeding could be watched, and by events transpiring in that locality we would shape our actions. I found the door could be locked from the inside, and, in addition to this, I improvised a bar by means of a chair leg wrenched off and thrust through a heavy iron staple that had been driven into the wall. Its fellow on the opposite side was missing. We then lifted the clothes press before the window, leaving just room enough on one side to clear away, and, if necessary, fire through; dragged the bureau against the door with all little noise as possible, and felt that everything that was possible had been done.

A deathlike silence reigned over the place, broken only once by the voice of the colored girl singing as she crossed the stable yard. I had fallen into a half doze, seated in a chair near the window facing the stable where Bose was on watch, when suddenly I felt a light touch upon my arm, and the voice of the faithful sentinel in my ear.

"Wake up, Mars Ralph; dey's foolin' 'bout de stable doo' arter de horses, 'shout,' brought me wide awake to my feet.

Cautiously peeping out, I saw at a glance that Bose was right in his conjectures. There were two of them—one standing out in the clear moonlight—evidently watching my window, while the other—and I fancied it was the landlord—was in the shadow near the door, which at that moment slowly swung open. As the man disappeared within the building, a low, keen whistle cut the air, and at the same instant I heard the knob of my door cautiously tried. The thing was now plain. While those below were securing the horses, those above were either attempting to gain access with murderous intent, or else on guard to prevent my coming to the rescue of my property.

A low hiss from Bose brought me to his side from the door where I had been listening.

"Dey's got de dorses out in de yard," he whispered, as he drew aside to let me look out through the broken window pane.

"Take the door," I said, "and fire through it if they attack. I am going to shoot that fellow holding the horses."

"Lordy, Mars Ralph, it's de tavern-keeper! He ain't no 'count. Drop de big man!" was the sensible advice, which I determined to adopt.

Noislessly drawing aside the curtain, I rested the muzzle of my pistol upon the sash where the light had been broken away, and drew a bead upon the tallest of the two men, who stood holding three horses out in the bright moonlight. The sharp crack of the weapon was instantly followed by a yell of pain, and I saw the ruffian reel backward and measure his length upon the earth, and then from the main building there rang out—

"Murder! Murder! Oh, help!"

Like lightning it flashed across my mind. There were three horses out in the open lot; there was another traveler beside ourselves. A heavy blow descended upon the door, and a voice roared—

"Quick! Burst the infernal thing open, and let me get at him! The scoundrel has killed Dave!"

"Let them have it, Bose," I whispered, rapidly reloading my pistol. "There, the second panel."

With a steady hand the plucky fellow leveled the huge weapon and pulled the trigger.

A deafening report followed, and again a shrill cry of mortal anguish told that the shot had not been wasted.

"Sab' us! how it do kick!" exclaimed Bose, under his breath.

The blow had fallen like an unexpected thunderbolt upon the bandits, and a moment later we heard their retreating footsteps flying swiftly along the corridor.

"Dar'll be moah of 'em heah before long, Mars Ralph," said Bose, with an ominous shake of the head. "J'pect dese b'longs to a band, and if dey was to come an' find us heah, we gone up shuah."

This view of the case was new to me, but I felt the force of it. I knew that such bands did exist in these mountains.

A hasty glance through the window from which I had just fired showed me

that escape in that direction was impossible. I looked out and saw a man with a rifle in his hand dodge around the corner of the stable. He was on guard, and then I knew that they had sent for reinforcements. Stunned for a moment I turned around and stared helplessly at Bose; but he, brave fellow that he was, never faltered nor lost his head for an instant.

"Boun' to leab heah, Mars Ralph," he said, quite confidently. "An' dar is no way ob gwyne 'cept for dat winder;" and he pointed to the one looking over the cliff.

I merely shook my head and turned to watch the window again, hoping to get a shot at the rascal on guard at the stable.

Bose, left to his own devices, at once went to work. I heard him fussing about the bed for some time, but never looked to see what he was after until he spoke.

"Now, den, fur de rope," I heard him say, and in an instant I caught his meaning.

He had stripped the bed of its covering, dragged off the heavy tick and the stout hempen rope with which it was corded. In five minutes he had drawn the rope through its many turnings and then, gathering the coil in his hands, he threw up the sash and prepared to take soundings.

The rope failed to touch bottom; but in nowise disheartened, he seized the cotton coverlet and spliced it on. This succeeded, and the cord was drawn up preparatory to knotting it, in place of cross-ropes.

In the meantime the silence from the outside had been broken more than once. A shrill, keen whistle, such as I had heard before, was given by the man on watch, and replied to by some one who seemed to be a little way off. Then I heard footsteps—soft, cat-like ones—on the verandah outside, showing that the robbers were still on the alert at all points.

At length Bose announced the ladder ready. It was again lowered from the window, and the end we held made fast to the bed which we had dragged to that part of the room for that purpose.

"Now, den, Mars Ralph, I go down fast and see if um strong 'nuff to bear us." And he was half-way out of the window before I could speak.

"No, Bose, you shall not," I answered, firmly, at the same time drawing him back.

"You must—"

The words were lost in the din of a totally unexpected attack upon the door. The dull, heavy strokes of the ax were intermingled with the sharp, quick clatter of hatchets as they cut away the barrier, and once in awhile I could hear deep oaths, as though they had been rendered doubly savage by our resistance.

"Here, Bose, your pistol. Quick!" I whispered, and the heavy charge went crashing through, followed by shrieks and curses of rage and pain.

"Come, Bose, hurry, or all will be lost!"

The brave fellow now wished to insist upon my going first, but he saw that time was wasting, and he glided down the rope, gradually disappearing in the heavy shadows.

The fall of one of their number caused only a momentary lull, and I heard the assault renewed with ten-fold fury. I dared not fire again, for I felt that every bullet would be needed when affairs were more pressing.

It seemed an age before I felt the signal from below that the rope was ready for me; but it came, and I let myself down, pausing an instant as my eyes gained a level with the sill to take a last look into the room. As I did so the door gave way and the blood-thirsty demons rushed over the threshold. I knew that I had no time for deliberate movement. They would instantly discover the mode of escape and either cut the rope or fire down upon me. I had taken the precaution to draw on heavy riding gloves, and my hands, thus protected, did not suffer as much as I expected.

With my eyes fixed upon the window I slid rapidly down and struck the earth with a jar that wrenched every bone in my body.

Quick as lightning I was seized by Bose and dragged some paces to one side, and close under the face of the cliff.

All this was done very quickly, but not an instant too soon, for down came a volley, tearing up the ground at the foot of the rope where a moment before I had stood.

"Thunder, they will escape! After them—down the rope!" yelled a voice almost inarticulate with rage.

I saw a dark form swing out and begin hastily to descend.

"Now, Mars Ralph," whispered Bose significantly, and with a quick aim I fired at the swaying figure.

Without a sound the man released his hold and came to the ground like a lump of lead, shot through the brain. Another had started in hot haste and was more than half-way out of the window when suddenly the scene above was brilliantly lighted up by the glare of a torch.

Again the warning voice of the watchful black called my attention to the figure now struggling desperately to regain the room; as before, I threw up my pistol, and, covering the exposed side, drew the trigger. With a convulsive effort the wretch, springing clear over and came down with a rushing sound upon the jagged rocks at the foot of the precipice.

A single look to see that the window was clear—we knew there could be no path leading down for a long distance either way, or they never would have

attempted the rope—and we plunged headlong into the dense forest that lined the mountain side.

We got clear, it is true, but with the loss of our animals and baggage; the next day, when we returned with a party of Regulators, we found the place a heap of smouldering ashes, and not a living soul to tell whether the robbers had fled.

The Queen's Engagement and How It Came About.

An inquisitive contributor to the *Figaro*, who writes under the name of "Ignatus," has apparently been diving deep into the secrets of Balmoral and Windsor. Some of his discoveries (?) would considerably surprise her Majesty's fancy, but, as the whole of the relations of "Ignatus" are sufficiently sober, and, if unreliable, at least charmingly recorded. The following extract, in which he tells the story of a Royal courtship, I think, as dainty a bit of writing as any I have seen in a paper in many a day:

Certainly the young Queen thought less of England than of marriage. The ministers would fain have made her a sort of international treaty. Beyond all doubt, Victoria was the finest match in the world. The Queen, however, was full of a host of little projects, ever shifting and changing, like the little heaps of sand the children raise in the Garden of the Luxembourg. She told her mother she would wed no one whom she did not love. The Duchess of Kent reported the speech to the Ministers, who thought it revolutionary in the extreme. Coronation day came, and next day the ball at Windsor. Among the dancers was a tall, handsome, slender student from the University of Bonn—her cousin, a Cobourg, like herself. The Queen noticed him, and Prince Albert did not return to Bonn. Even had he not loved, he would have stayed, and he loved. But his cousin was the Queen! Here the woman had to make the advances. Victoria, deeply touched as she was by this love (which was never more to leave her), could not easily conquer the maidenly timidity due to her severe education. Nevertheless, a morning came. I assure you I invent nothing. Although the Queen has consented to relate these delightful incidents, Prince Albert has told them to his friends.

Nevertheless, then, a morning came. They were riding together, he and she, down the great avenue of oaks at Windsor. Those oaks were younger then, but old enough already. After a gallop they found themselves alone. We know how dangerous it is for a man and woman to ride together. Suddenly the Queen took a sprig of honeysuckle from her bosom, and, stopping, offered it to Prince Albert. Bending to reach it, his lips touched the tips of his cousin's gloves. Perhaps 'twas the fault of the horses. The woods of England and of France know well how many loves the noble brutes have been the cause of. A silence followed, more sweet than anything ever sung to the heart by Mozart.

Next morning Prince Albert still wore the honeysuckle in his button-hole. He kept it even when it had faded. A fortnight after that ride, the Plenipotentiary Minister handed King Leopold of Belgium a tiny letter, closed by an enormous red seal, as though it hid a mighty secret of State. It began, "My Dear Uncle," and was signed "Victoria." A month after, the Queen mentioned her intention to marry Prince Albert of Saxe-Coburg-Gotha to her Ministers. She asked their counsel—but with a pretty air of decision which caused them to reply with a unanimous "Yes." The wedding took place on the 10th of February, 1840. The Queen of England had married for love—like a bourgeois. I was going to say, but the bourgeois marry but little for love now. Lord Melbourne was right when he told England that "The Queen's marriage was the Queen's romance."—*Chicago Tribune.*

Our Ex-Presidents and Their Fortunes.

General Grant's long absence in Europe has called attention to his pecuniary resources, and to the wealth of the Presidents who have preceded him. General Grant suffered a good many losses within the latter part of his administration, but has income enough probably to live moderately without annoyance. His children who are married are able to take care of themselves, and the younger boys are certainly bright enough to do it. But this was not true of all the Presidents. Jefferson died rather poor. Congress purchased his library at a very extravagant price, and without that it is said he would have found it very difficult in the last years of his life to have subsisted. Madison saved considerable money out of his salary, and died quite rich. Congress gave his widow \$30,000 for his manuscript. James Monroe probably died poorer than any other President. He had absolutely nothing, and was buried by the charity of his friends. John Quincy Adams was always thrifty and prudent, and left quite a fortune. His heirs own considerable property in Washington to-day. Martin Van Buren died rich. He always kept his eye open for the main chance, and pinched pennies very closely. He spent scarcely anything for politics. Daniel Webster, although never President, spent a sum of money which would have been equal to a large fortune, the result of his professional labors and of his political work. He left a little estate to his children, and was worth \$20,000, while he owned his friends more than a quarter of a million. Henry Clay, who was never rich enough to entertain very much in Washington, managed his affairs very prudently, and left an estate estimated at about \$100,000. Folk always economical in office, saved \$60,000 out of his term, and left to his heirs \$150,000. John Tyler was a most thrifty person in the Presidential office. When he entered upon it he was bankrupt, and he saved money in it, married a rich widow and died rich. Zachary Taylor left perhaps \$300,000. Millard Fillmore was wealthy, and left his heirs a considerable sum. Ex-President Pierce died leaving an estate worth not over \$50,000. Buchanan left but a moderate fortune. Hayes is rich, and is saving money on a \$60,000 salary.—*Troy Times.*

EXPLOSION AND FIRE.

A Terrible Calamity in New York.

A Candy Factory Blows up and Burns.

One Hundred and Twenty-five Girls Perish by the Falling Walls and Flames.

On the evening of Dec. 20th, an explosion followed by fire occurred in the great candy factory of Greenfield & Son, No. 63, Barclay street, New York. The boiler, which was under the sidewalk on Barclay street, burst, tearing away the entire front of the building and scattering the ruins in all directions.

A large number of girls, of all ages, were employed at the time in the building.

The wall fell within a few minutes after the explosion. The building, five stories high, fell into the street. Fifty-six wounded and one dead were reported at Chambers street hospital at 6:45 o'clock. A number were also sent to Bellevue and other hospitals. It is estimated that the wounded will reach 125. About fifty escaped by the College Place entrance and a small number got out through the sky lights, walked over the roofs and got down the sky lights of other buildings. The book-keeper, who was on the Barclay street side of the building, was blown through the window to the street and badly cut on the head. Several jumped from the second story and escaped with slight injuries, the fall being broken by policemen and citizens on the sidewalk below. The parties employed in the factory were principally young girls and boys from 8 to 20 years. Owing to the approach of the holidays, double force was employed, one working the day and the other the night. The number in the building at the time of the disaster is variously estimated at from 100 to 300. Some of the girls had their hair burned entirely off their heads. The greatest sacrifice of life was among the young girls, many of whom from 8 to 15 years, were employed in selling, assorting and picking candies. On the first floor, over the boiler, which was situated in the basement of the rear of the Barclay street wing of the building, and not under the sidewalk as first reported, none are known to have escaped.

The building occupied by Major & Knapp, engravers, on the opposite side of College Place, caught on fire from the sparks, but the flames were extinguished with but trifling damage. The total loss is probably \$250,000. The news of the explosion spread over the city very rapidly, and the wildest rumors and great excitement prevailed. Large crowds hurried from all quarters to the scene, but the police kept the crowd several blocks away from the place. Many persons having children or relatives working in the factory, as evening wore on, and they had not returned home, sought the scene of the disaster, and the hospitals and police stations, in search of the missing ones.

Mr. R. Klein, of 53 Leonard street, states that he was in the building about ten minutes before the explosion and there were a great many persons there at the time; he passed in front of the building two minutes after the explosion and saw on most of the floors, as the front wall had fallen, a great many boys and girls rushing about in an excited and confused manner, but they became obscured to the view by the smoke and flames in a few seconds. There seems to have been no possibility of their getting out alive.

The fire was one of the quickest ever seen. In less than three minutes the flames had ascended completely to the roof. Peter Staudmiller gives a vivid description of the affair. He is employed with Rodgers & Co., and was within forty feet of the doorway when the explosion occurred. It seemed to throw up the whole sidewalk, and the front of the building fell to the street. There was a two-horse truck of the Delaware & Lackawanna Express Company passing and the wall fell on the horses, and the driver said he believed there were nearly 200 persons occupied in the building at the time. There were not more than a dozen girls employed on the ground floor, most of the boys and girls being engaged on the second and third floors.

Staudmiller says he is positive that not more than six girls and a dozen men came out alive through Barclay street entrance. The elder Mr. Greenfield, was about the first who rushed out, and he was much scalded. He saw about a dozen making their escape by the roof to adjoining roofs.

The scenes at the Chambers Street Hospital were heartrending in the extreme. Ambulances were quickly at the fire and were kept busy in taking the wounded to the hospital. The station house and Chambers street hospital were besieged with men, women, and children, all anxiously inquiring for some missing relative.

The Rev. Dr. Cuyler publishes in the *Independent* his annual appeal for total abstinence on New Year's Day. He says that coffee and lemons will satisfy the demands for hospitality, and he appeals to women not to be tempters. He takes ground against Moody and Murphy, who claim that piety will obliterate the appetite for alcoholic drinks, although he thinks abstinence is easier for Christians than sinners. He asserts that inebriety is on the increase among women.

Corned Beef.—Boil precisely the same way as ham. Boil the water away to what will barely cover the meat; when done set the vessel aside to simmer slowly. The juices that are extracted by the water will return now, and your beef be almost like jelly in tenderness.

JOSH BILLINGS' PROVERBS.

His Lecture on "Sandwiches and Specimen Brix."

The Academy of music was fairly filled last evening by an audience anxious to hear Josh Billings' (Henry W. Shaw) lecture on "Sandwiches and Specimen Brix," which consisted of extracts from his printed works. The lecturer, with his spare, bent form, intelligent face, black mustache, full gray beard and long, black hair, flowing to his shoulders, appeared all over the typical Yankee, and his appearance was emphasized by the quizzical, Paul Pry glance which he now and then cast at the audience with his bright eyes, as he arranged the stand in order to obtain the best light on the book which he drew in a sly manner from beneath his coat.

"I do not propose to speak on the 'lost arts,'" he said, "the rise and decline of the Roman Empire, the purchase of the British Island by Secretary Everts, the third term, or of the well-settled fact that the eight spot takes the seven. I simply propose to speak of every-day facts, by monograms, essays and quips. The American wants his humor caustic on the half-shell, with cayenne pepper, while the Englishman is satisfied to take his fun smothered in mint sauce, and wait till the next day to digest it. But if you want to make an American laugh or convince him, you have got to do it quick. England has more wit, and America more humor." The lecturer then began his readings, from which the following selections are given:

"This life is like a game of cards. We mostly play the hands dealt to us, and the credit is not so much in winning as in playing a poor hand well."

"When I hear a man bragging about what he did last year and about what he is going to do next year, I can tell pretty near what he is doing now."

"Don't despise your poor relations. They might get rich some day, and then it would be so hard to explain things."

"The reputation a man gets from his ancestors wants about as much altering to fit him as their clothes would."

"There is no woman stationed on the face of the earth who tries so hard to do right and fails oftener than the average mother-in-law."

"An enthusiastic is an individual who believes about four times as much as he can prove, and can prove about four times as much as anybody else will believe."

"Falling in love is like falling down stairs; it's hard work to find out just how it was done."

"A man who has been waiting for the last fifteen years for something to turn up, is still in the same business."

"A pooodle is a woman's pet, and I have seen some I would like to swap livings with."

"Mice can live anywhere comfortably but in a church; they fat very slowly in a church. This proves that they can't live on religion any more than a minister can."

"The worst tyrant in the world is a woman who is superior to her husband and lets everybody know it."

"Love is like the measles, you can't have it but once, and the later in life we have it the tougher it goes with us."

"Great thinkers are not apt to be great whistlers. When a man can't think of anything he generally begins to whistle."

"The man you can have to work on a farm for nothing and board himself, just about earns his wages."

"Neatness, in my opinion is one of the virtues. I have always considered it twin sister to chastity, but none work so hard as the victim of ecstatic neatness. I have seen a neat person who would not let a weary fly rest long enough on their best wall paper to take breath, and who would chase a single cockroach up and down stairs until his legs were worn off."—*Philadelphia Times.*

Flying by Balloon.

The balloon is a grand drifting machine, and by the aid of the trade winds should reach almost any part of the globe; but air navigation, in the scientific sense, will be accomplished finally on the bird principle. Letters I have recently received from various parts of Europe, convince me that the solving of the problem is not far off. A number of scientific aeronauts have written to me concerning a flying machine now being perfected by a distinguished scientist in Paris, which will doubtless be able to carry cargoes in any direction and also to any distance. It is a mere matter of time in mechanical progress. Why should not man fly as well as the eagle, the bat, the squirrel, even the fish essay this mode of locomotion for 200 or 300 yards.

While talking on the subject of the science of ballooning, he said: "Balloon may be made of boiler iron, if built large enough. You know it is the battle of cubes and surfaces. When the surface is doubled the cube is quadrupled, and a balloon of 400 feet diameter, of copper boiler plate will lift up a man of war ship and sail away with it. With such a balloon, stocked with bombs and other destructive munitions of war, think what consternation could be carried into a besieged camp. But the mission of the balloon will be more for scientific exploration. That overshadowing science called meteorology will yet provide its definition in the use of the balloon."—*Interview with Professor Wise—St. Louis Globe Democrat.*

Bechamel Sauce.—To two ounces of butter add a tablespoonful of flour and work them together, adding at intervals a pint of milk; put it on the fire, stirring continually; when it begins to get thick remove from the fire; beat up the yolk of an egg with a teaspoon of water; stir this in the sauce, and season it with salt and white pepper.

Mint Sauce.—Two tablespoonfuls of mint and one of sugar, half a cupful of cider vinegar; let stand on the fire thoroughly heated.

THE WORLD OF SCIENCE.

A Pinner in Plenty, etc.

At a recent meeting of the New York Academy of Useful Arts, attention was called to a simple method of filtering the air of an apartment. The object is to free the air from dust, excessive dampness, and possibly from the germs of malaria. The contrivance consists essentially of a fibrous woven fabric, strengthened by a brass wire. It is only to be applied to windows and ventilators, and may be of service on rail-way cars to exclude dust. It has the merit of checking drafts, while admitting air. Its general use might tend to prevent the spread of malarial diseases, and modify the dangers that dirty streets occasion to the health of city residents.

A New Arctic Expedition.

A whaling steamer the *Vega*, has been bought for the Swedish Arctic Expedition, which is to start next July from Gothenburg. The vessel is very strongly built, and can carry coal enough for a cruise of 8,000 miles, she is to be supplied with sufficient provisions to serve for three years. Capt. Palander will be in command, less than thirty persons will be on board, in all, three or four will constitute the scientific corps. The King of Sweden, the Government, Oscar Dickson, of Gothenburg, and Mr. Sibiriakoff, a Russian, conjointly defray the expenses. The projected voyage will be eastward from Novaya Zemlya, along the Siberian coast, down through the Behring sea, crossing back around Asia and via the Suez Canal. This will circumnavigate both Europe and Asia.

Deep Sea Drilling in the Gulf of Mexico.

Prof. Alexander Agassiz is starting for Havana with an assistant, there to go on board the Coast Steamer *Blake*, which has just sailed on a scientific cruise that will occupy this winter, in the work of obtaining soundings in the Gulf of Mexico. As this work is conducted, it is made, no less useful to terrestrial physics and natural history than to navigation. By a study of the animals dredged from the bottom of the Gulf, Prof. Agassiz will be enabled to make important comparisons with the fauna of the Atlantic, and especially as to growth, habits, migrations and changes of living forms found in the waters near the British Islands and the Scandinavian Peninsula. The expedition is under the command of Lieut. Commander Charles D. Sigbee, U. S. N., who has had several years' experience on coast-survey duty, and has been notably successful in deep sea soundings. The *Blake* was named for the late commander George S. Blake, who who made the soundings for the coast survey charts from Point Judith to Cape May, thirty-five years ago.

Cheap Electrical Apparatus.

The youth who study science now, have great advantages over their fathers. Books on scientific subjects are written more simply, and the experiments suggested are less costly than the older ones. A further improvement has been devised by preparing cheap sets of apparatus for the illustration of an entire branch of science. In carrying out this plan with respect to electrical science, the well known work of Prof. Tyndall has been followed, and apparatus is being prepared to execute each of the experiments he describes. Any of the pieces of apparatus can be bought separately at an average of about a dollar apiece, the whole set for that science costing \$65. With such apparatus in his hands a student learns to think and operate for himself, far more effectively than with costly machines which he rarely permits to use. The system has been developed in this city, and already has been found of good service in the furtherance of intelligent educational work; the apparatus being neatly made, presents an attractive appearance, and helps to interest the scholar in the care and management of the tools of science.

Nebraska's Fault to a Volcano.

The last earthquake in the west was supposed to have radiated from a point in Nebraska that has been popularly regarded as the site of a volcano. Prof. Samuel Aughey, of the Nebraska State University, has recently made an examination of the ground. The seat of disturbance is on the bank of the Missouri river, in Dixon county, about thirty-six miles from Sioux City. A bluff about 1,100 feet long and 160 feet high, sloping at an angle of 60° to 80° toward the river, is at present the place where the phenomena are most exhibited, but there other bluffs a few miles distant, have been similarly affected. Two years ago a portion of this bluff, half as large as what is left, broke away and fell partly into the river. On the bluff sounds were heard proceeding from the interior, especially on placing the ear to the ground. Flames sometimes broke forth, occasionally in great quantities, and were driven by the wind. On digging into the bluff, intense heat stopped the work after proceeding but a few feet. Selenite, alum and magnesia sulphate in crystals were abundant. Prof. Aughey regards these features as not volcanic in the usual acceptance of the term, but simply the result of local chemical action. The formation is cretaceous. The bluff is capped by calcareous carbonates