A VOYAGE TO THE SUN

News From the Government Scientific Expedition Which Will

WATCH OLD SOL HIDE HIS FACE.

Traveling Thousands of Miles to Investigate an Eclipse.

A TRIP TO THE WEST COAST OF AFRICA

[CORRESPONDENCE OF THE DISPATCH.]

ON BOARD U. S. S. PENSACOLA, October 28.—The United States Scientific Expedition sailed from the Navy Yard at Brooklyn early on the morning of October 16 on the United States man-of-war Pensacola for West Africa. The primary object of the expedition is to observe the total eclipse of the sun, which will occur on December 22, but several departments of science beside astronomy are represented, and will be in charge of specialists. It would be well to give a brief account of the origin of the expedition. Last December Congress made an appropriation of $5,000 to pay the expenses of an observation of the total solar eclipse of last January, but because of some delay in the passage of the bill the money was not available until within ten days before the eclipse occurred, and so could not be used. As a result of the suggestions of Prof. David P. Todd, of Amherst College, the $5,000 was re-appropriated last March for the payment of the expenses of a scientific expedition to observe the next solar eclipse. Prof. Todd who has already conducted astronomical parties to Texas, California and Japan, was appointed by the Secretary of the Navy to conduct this expedition. With the valuable assistance of Admiral Walker, Commodore Dewey and other persons interested in scientific work, Prof. Todd was enabled to organize the expedition which consists of 13 men with four assistants. The following branches of science are represented, astronomy, anthropology, biology including zoology, entomology and botany, geology, meterology and physics.

Prof. Todd has charge of the astronomical work, and he is assisted by Profs. Loomis and Biglow, of Washington, Mr. Jacoby, of Columbia College, and Mr. Davis, of Princeton. All of these gentlemen will be engaged in making observations of the eclipse. As has already been stated, the eclipse will be total, by which is meant that the moon will pass between the earth and sun in such a way as to totally obscure the latter body. Partial eclipses also occur, and the sun is then only partially obscured. About 70 total solar eclipses occur in a century and in the present year there have been two such eclipses. This has not happened for over 150 years, and will not again occur for over 100 years. The next total solar eclipse available for astronomical observation will take place in 1893. It has been the custom of astronomers for something over a century to observe solar eclipse and probably about 100 total solar eclipses have been accurately observed. The astronomers of the expedition have been calculating the exact time of the eclipse which they are to observe, but because of the uncertainty of the latitude and longitude of the place where the observation is to be made they experienced considerable difficulty. According to what seems to be the best authority for the latitude and longitude the eclipse will occur at 2 o'clock 59 minutes and 54 seconds in the afternoon, which will be 8 o'clock 45 minutes 50 seconds in the morning by Washington time. With the proper latitude and longitude the time of the eclipse can be calculated to within one or two seconds.

THREE MINUTES OF DARKNESS.

The duration of the total eclipse will be 3 minutes and 6 seconds, of the entire eclipse about 3 hours. There are several objects in making careful observations of a total solar eclipse. One of the principal is to make photographic records of all partial phases. These will be valuable in correcting the tables of the motion of the moon and this, of course, has an important bearing upon the subject of navigation.

Another and no less important aim of the astronomers is to obtain photographs of the corona of the sun. The corona is a halo of silvery light that is seen around the sun only during total eclipse, and never at any other time. The object of a study of the corona is to obtain a better knowledge of the constitution of the sun and surroundings. This has a close relation to terrestrial meteorology, a science which is now in its infancy, and one the knowledge of which will greatly conduce to human welfare.

Prof. Cleveland Abbe, of the United States Signal Service, is the meteorologist. Especial opportunities are offered for observations of this kind, because of the fact that the route of travel is longer than the usual one, and partially optional. One of especial lines of research will be the systematic observation of the movements of the air. The temperature and pressure of the air will also receive attention. Prof. Abbe uses several methods for determining the movements of the air. One is by means of anemometers attached to the upper part of the ship, another by the use of balloons that are inflated with hydrogen and set free, and a third with peculiar mirrors arranged for observing the movements of the clouds.

Mr. E. D. Preston, of the coast survey, will do the work in physics. The relative forces of gravity will be found at the different stations by means of two reverse pendulums of invariable length. They will be allowed to swing night and day, and the number of oscillations made in 24 hours at the separate stations being compared the relative forces of gravity follow. The three magnetic elements declination, dip and intensity will be found by observations on three successive days at each station if time permits.

Mr. Harvey Brown, of the National Museum, will superintend the collection of all biological specimens, and as West Africa abounds in numerous and rare animals of many kinds, a large and valuable collection will undoubtedly be made.

Mr. C. A. Orr, of Clark University, is the anthropologist. It is the intention to make as full a study of the customs and habits of the natives as time and opportunities will allow; to make physical measurements of representatives of the different tribes; to make collections of the mind-products of the natives and photographs of characteristic individuals.

Mr. Heli Chatelain, now of New York, accompanies the expedition as linguist. Mr. Chatelain is a Swiss and has spent three years in the part of Africa to be visited, studying and teaching the languages, and has already proven to be of valuable assistance in many ways.

THE PROPOSED ROUTE

of the expedition comprises a distance of nearly 15,000 miles. The first stop will be the Azore Islands, where we will take a supply of coal. From here we will go to the Cape Verde Islands for coal, and after one more stop for the same purpose, we will go direct to St. Paul de Loanda, a Portuguese city of some 15,000 inhabitants on the West coast of Africa and 9° below the equator. Here the expedition will go ashore and start on a journey of about 100 miles up the Quanza river for the village of Muyima [pronounced Mu-she-ma], where the astronomical observations will be made. From St. Paul de Loanda the expedition will sail along the coast of Africa south, stopping probably at several places, including Cape Town. The islands of St. Helena and Ascension will next be visited, after which the return home will begin.

The Pensacola is one of the oldest of the Government steamships, and after the extensive repairs of the past summer is very comfortable, probably more so than any of the others would be. Captain A. R. Yates is in command, and no better man could have been selected to convey the expedition. It is his constant aim to assist the members of the party in every possible way. His efforts are heartily appreciated by all. There are 425 men on board, including the crew, officers and expedition. In examining the records of the crew I have found some facts which may be of interest. The Pensacola's crew, with marines and apprentices, numbers just 371 men, the largest or any man-of-war. The following list shows the birth place of each of these men, and I am told by Captain Yates that it may be considered as an average crew of the American man-of-war:

United States	187	Other European countries	22
British Islands	67	British America	4
Scandinavia	50	South America	2
Germany	31	Asia (Japan 8)	9
Africa	2	Madeira	5
West Indies	1		
St. Helena	1		

It will be noticed that just about one-half were born in the United States, and that 68 per cent are from English-speaking countries. It may seem surprising to many that our navy is composed of so large a per cent of foreigners, especially as it is so unlike any other navy in this respect. But there are several reasons why this is the case. In the first place, more favorable opportunities for home life are offered workingmen in the United States than in any other country, so Americans can live much better at home than in the navy. Again, there is no such stimulus to sea life in America as there is in most European countries, where geographical conditions are favorable and men are compelled to serve in the navy of their country. All in all, American laborers are not content to live the life of sailors when circumstances for a much better life exist in our country.

Our trip thus far has been uneventful. Though we have had a number of squalls, the weather has been very good. Most of the party experienced the usual attacks of sea-sickness, but after we were four or five days from New York all had recovered and gained possession of their "sea-legs," as the seamen say, and were then quite "sea-proof." So we can now enjoy those truly beautiful sunrises and sunsets upon the blue ocean with the paler blue sky and its indescribable hues for a background, and blunt indeed must be the aesthetic side of one's nature it he will not pause in the midst of such sights and reflect upon the wonders and beauties of nature. Nevertheless after a period of 20 days shall have elapsed without the sight of land I am sure the first glimpse of the Azores will be hailed with delight. CLAIRE A. ORR.

THE ROUTE OF THE EXPEDITION.

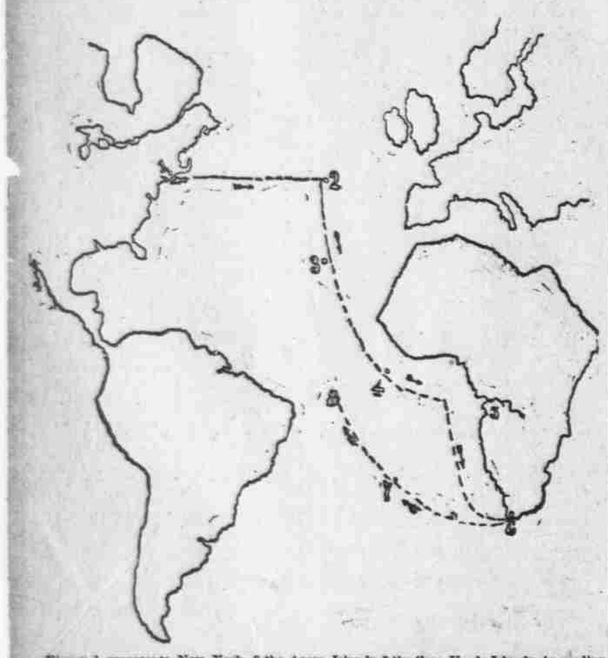

Figure 1 represents New York, 2 the Azore Islands, 3 the Cape Verde Islands, 4 a coaling station, 5 St. Paul de Loando and the Quanza river, 6 Cape Town, 7 Island of St. Helena, and 8 Ascension Island.

THE largest and best selected stock of diamonds, watches, jewelry, novelties, clocks, bronzes, statuary, gold and silver handle canes and umbrellas, sterling and silver plated ware, etc. All new goods purchased this fall; no old or shop-worn stock. Large street clock in front of door.
M. G. COHEN,
Diamond Expert and Jeweler,
533 Smithfield st.
Store open evenings until January 1.

UNTIL January 1 our store will be open evenings. M. J. Cohen, diamond expert and jeweler, formerly cor. Fifth ave. and Market st., now 533 Smithfield st. Street clock in front of the door.

Rich, Elegant Plates.
Now is the time to select. We never had so many from 25c up to $25 each. They are marvels of beauty and design. Call early.
REIZENSTEIN,
152, 154, 156 Federal st., Allegheny.
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Winter Underwear.
Big bargains in ladies, gents and children's scarlet, camel's hair, natural wool and merino underwear at H. J. Lynch's, 438 and 440 Market st.

CALL for Frauenheim & Vilsack's celebrated Pilsner beer, on draught at all first-class bars.

LACE curtains—500 pairs just received specially for holiday trade—to sell quickly at less than importation prices.
TTSSu HUGUS & HACKE.

BEAUTIFUL diamond rings and bracelets, at Hauch's, No. 295 Fifth ave. WFSU

EVERY DAY SCIENCE.

Remarkable Instances of the Successful Use of Divining Rods.

SOLIDIFICATION OF NATURAL GAS.

Recent Interesting Discoveries at the Pool of Bethesda.

SCIENTIFIC AND INDUSTRIAL NOTES

[PREPARED FOR THE DISPATCH.]

Readers of THE DISPATCH who desire information on subjects relating to industrial development and progress in mechanical, civil and electrical engineering and the sciences can have their queries answered through this column.

Prof. Ray Lankester having recently expressed some doubts on the alleged powers of a boy "water finder," Dr. McClure, who is chairman of the company by whom the boy is employed, has denied emphatically that the boy, whose name is Rodwell, is an impostor. He says that the lad when tested never failed to find either water or mineral veins, the lodes having always been found exactly at the places indicated. The divining rod which he holds only moves in obedience to the muscular contraction of his hands, and a rod of any kind of wood, or even of any material substance whatever can be used, provided it be a conductor of electricity. Dr. McClure's statements have excited considerable comment in England. The phenomena of tests by the divining rod are not by any means new. They have never been described from a scientific point of view, nor has any philosophical explanation of them ever been advanced, but there is no question whatever of their existence, and of their being now regarded by the most advanced scientists as beyond the region of chicanery and imposture.

Mr. W. J. Jenks, in a recent lecture on "The Protection of Electric Light Stations from Lightning," treats the subject very exhaustively, and shows that where the ability to locate electrical or magnetic attraction is vested in an individual the results are absolutely reliable. He instances the case of two gentlemen of Merrimac, Mass., named Prescott, who for several years have given displays of this rare faculty. As an illustration of the certainty with which the Prescott brothers could indicate the location of electrical attraction, Mr. Jenks gives a well authenticated incident which took place at Amesbury not long ago. Several old citizens were skeptical as to the accuracy of the conclusions supposed to have been reached and determined on a severe test. Taking 20 or more citizens as witnesses, they requested the Prescott brothers to accompany them, and indicating a stretch of highway before them, some 40 or 50 rods in length, stated that some years previous lightning had struck on that road, and wished to be informed as to the exact spot. Proceeding several rods, two cross currents were marked out, both extending for some distance in the traveled pathway and crossed by another at nearly right angles. Testing carefully the roads in both directions, this electrical center was pointed out as the spot of greatest danger in the vicinity. The party was then invited to examine an ancient volume of official records, where it was chronicled that on the 7th of October, 1802, a man who was driving two yoke of cattle was struck by lightning in that exact spot, and with all his animals was instantly killed. The occurrence had been deemed at the time so remarkable that the circumstance, with a minute description of the locality, had been recorded, though long forgotten by all but perhaps a few of the oldest citizens.

Discoveries at the Pool of Bethesda.

Among the notes of the quarterly statement of the Palestine Exploration Fund is an account of fresh discoveries at the Pool of Bethesda. In clearing out the crypt of the church built at the southwest angle of the pool in the times of the Crusades, at the northwest corner, close to an opening which permits the water to be seen and drawn up, and surrounding a little door still obstructed, which doubtless affords a way of descent to the middle of the pool, were found very interesting remains of a mural painting which singularly confirms the already numerous proofs of the authenticity of the Pool of Bethesda. Arab fanaticism has destroyed the heads and hands of the figures, but notwithstanding that, over the little door mentioned there is visible the beautiful and well-preserved nimbus of a winged figure, which causes the water by which it is surrounded in the picture to be moved and agitated. This is an interpretation of a familiar passage in ancient history, which describes how an angel went down at a certain season into the pool and troubled the water.

The Ancient Art of Embalming.

In view of modern progress in embalming, dessication, and other methods of preserving the dead for an indefinite time, it is interesting to note that it has been estimated that more than 400,000,000 human mummies were made in Egypt from the beginning of the art of embalming until its discontinuance in the seventh century. There were three grades of embalming. For preserving his relative in the most approved style the Egyptian had to pay $1,225; in the second grade the operation cost about $375; the third method was so cheap as to be considered "within the reach of the poorest citizen," and involved the pickling of the body for some days, and then a boiling in bitumen. These mummies are devoid of hair and eyebrows, and are black, heavy dry and very hard to break.

Photoramic Lantern.

The photoramic lantern is the name of a new device by which a photographic artist claims to be able to project upon a screen or wall, not mere fixed objects, but scenes of life and movement, such as are beheld on the white table in the camera obscura. The invention includes a peculiar sort of photographer's camera of about a foot square. The instrument is pointed at a particular moving object, and by turning the handle a number of photographs are taken every second. These successive phases of a scene in movement are then converted into transparencies and placed in succession upon a long strip, which is wound on rollers and passed through the photoramic lantern, with results which appear to be similar to those of the well-known philosophical toy, the "zoetrope."

Lighting Street Cars.

The method of lighting street cars is undergoing perhaps as complete a change as the motive power itself. On cars fitted with electric motors a flood of light is readily obtainable from as many incandescent lamps as are desired, and by recent devices for coupling to the motor car any cars which may be used as tow cars or "trailers" an entire train of cars may be similarly lighted, receiving the current for the purpose from the motor cars by means of the aforesaid couplings. It is safe to say that the street car of the future will be much more generously illuminated than has been either attempted or practicable in the past.

Eating Before Sleeping.

Dr. W. Washburn, in a note on the subject of "Eating Before Sleeping," in the *Medical Record*, says: "Now, there is really no excuse for the old prejudice, and we are only able to sleep well without eating (especially if hungry) by long training against nature. For is it not a fact that the stomach requires more blood during the period of digestion, and what more natural, then, than that the blood be drawn from the brain, as it is the most vascular organ of the body, and during sleep less blood is required in the brain? Hence digestion should aid sleep, and sleep aid digestion."

Solidification of Natural Gas.

A new process for condensing natural gas is well spoken of. The process itself, as well as the machinery needed to carry it out, is very simple. Gas when transformed into solid matter is not dangerous to handle. Its expansive force is very great, and when the substance becomes heated above a certain degree it will become very volatile and will burst an ordinary cask or can, but the effect is gradual and it does not explode. The inventor claims that with a ten-horse-power engine he can reduce enough gas in one day to supply a city of 50,000 inhabitants with fuel for 24 hours.

Pulp From Pine Leaves.

A method of treating pine leaves for the purpose of converting them into a pulp for the manufacture of a strong and superior paper—by exposing the leaves to the action of steam under pressure—has been successfully tried. The steam serves by its heat and pressure to soften the fibers and to draw from the pores and vaporize all resinous, oily and spirituous matters, leaving intact the fibers, which are then worked into pulp after the manner in which vegetable fibers are usually worked for making paper, papier mache and the like, and is bleached by means of suitable chemicals.

Promoters of Tubercular Disease.

Great stress has lately been laid by the best medical authorities on the importance of looking well to the teeth of patients having a tubercular tendency, and seeing that they keep their mouth in a thoroughly healthy and aseptic condition. The fact has been established that diseased roots and teeth have a great deal to do in starting tubercular trouble in the lymphatic glands of people predisposed to this disease. Tubercle bacilli gaining admission to the jaw through the diseased teeth, speedily infect the structures in the neighborhood.

Obedience of the Electric Motor.

The ability to reverse its motion which the electric motor possesses, and the instantaneous nature of the obedience it yields to the controlling switch, are among its valuable characteristics. In several instances lately have these properties been the direct means of averting catastrophes on electric lines. A recent report states that a drunken man staggered on to the line and fell on the rails within three feet of the engine. The driver instinctively reversed the direction of the current at full speed, and the man was saved.

Curious Specimens of Varnish Gums.

Two very interesting specimens of Zanzibar copal gum have just reached this country. They are neatly polished, and are full of pre-historic insects of various kinds, which thousands of years ago became imbedded in the gum. What lends peculiar interest to these specimens is that the origin of such gums is lost in antiquity, and not only are the trees which are supposed to have produced them long ago extinct, but the very insects found in the gum do not belong to any known varieties.

Silk From Wood Pulp.

One of the most remarkable of textile materials of recent introduction is the silk made from wood pulp, which was exhibited at the Paris Exposition. The fiber is produced from a nitrated cellulose obtained from wood pulp by a secret process. This artificial silk is said to be perfectly uniform in thickness and perfectly round in section; it can be dyed any color and interwoven with cocoon silk in manufactured goods, giving strength and brilliancy to the fabric.

To Destroy Insects on Animals.

A wash made of the water in which potatoes have been boiled is a certain means of destroying insects on animals. The first application is generally effectual, but it had better be repeated a few times in order to destroy the eggs. The same means may be used against the parasites in which mange originates, and probably would remove plant lice also. This insecticidal property of the potato is supposed to be owing to the solanine, which is one of its constituents.

Welding Cables by Electricity.

Some very interesting experiments in uniting cables by electricity for use on cable roads have recently been made. It has been demonstrated that while by means of a splice 30 per cent only of the strength of a perfect cable was secured, by an electric weld 87 per cent was secured, thus proving the superior efficiency of the latter method.

Snow-melting Machine.

A new device for getting rid of snow in the streets or on the horse car tracks has been patented. Experiments with it show that it can melt a ton of ice in five minutes, or a ton of snow in four minutes, at a cost of about 4 cents for the melting of every two-horse load. The machine has somewhat the general appearance of a fire engine.

Uses of Common Salt.

Among the many uses of common salt may be mentioned two which admit of frequent application. Salt put in water which surrounds the ordinary glue pot causes a hotter glue to be obtained than where simple water is used. Salt in the water where mason work is being done in cold water, prevents disintegration by frost.

Tottering to its Base.

Health totters to its very foundations when vigor begins to wane. To check its loss, to repair its general damage to the constitution which this infects, impaired digestion must be rendered active, the conversion of food into blood must be facilitated. No tonic on earth can accomplish this so effectually as Hostetter's Stomach Bitters; a remedy also for malaria, constipation and biliousness.

HOLIDAY TABLE DELICACIES.

Largest Line—Lowest Prices.
Look for our special card in next Sunday's Dispatch. Better send for the Housekeeper's Guide; it will post you on everything in our line; also contains valuable information for all housekeepers. Store open till 9 P. M. until Christmas.
WILLIAM HASLAGE & SON,
18 Diamond Square, Pittsburg.

Good Advice.
The holidays are approaching, and you are doubtless thinking of how you will gladden the hearts of your family with a beautiful piano or organ. Many pianos are offered. You will hardly know which to buy. Take the Kranich & Bach, and run no risks. It is the very best the market affords. Its construction is superior to any piano made. The increasing sales attest its popularity. We can refer to hundreds of purchasers in the two cities. We have also the elegant "Stultz & Bauer" and Jas. M. Starr pianos, Miller and Packard organs. Prices and terms to suit all. Warerooms open evenings until after the holidays.
LECHNER & SCHOENBERGER,
69 Fifth avenue.

Odd Cups.
We have 500 styles of teas, coffees, chocolates and bouillions at popular prices; in single dozens or harlequin sets, popular prices. REIZENSTEIN,
152, 154, 156 Federal st., Allegheny.
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A BARGAIN—50c, 60c and 75c a yard for Priestley's black silk warp Henriettas, were 85c, $1 and $1 25.
TTSSu HUGUS & HACKE.

LOWEST prices in the city for fine bronzes, at Hauch's, No. 295 Fifth ave. WFSU

Cold Feet
Made comfortable by wearing our felt slippers—for young and old—at low prices.
CAIN & VEHRER, Fifth ave. and Market st.

EAST VERSUS WEST.

Arguments in Favor of Philadelphia as a Mechanic's Residence.

RENTS LOWER THAN IN PITTSBURG.

Cheap Transportation, Good Drainage and Excellent Markets.

A PARADISE FOR EAGER DUCK HUNTERS

[WRITTEN FOR THE DISPATCH.]

An article in last Sunday's DISPATCH, signed F. H., is evidently intended to create an impression about the cheapness of living in Pittsburg as compared with Philadelphia, which is not quite correct generally or in detail. A comparison of Philadelphia homes with "Pittsburg Cozy Homes" of the same class, location and rental will always result in favor of Philadelphia.

The locality visited in West Philadelphia by F. H., between Chestnut and Vine streets, has some very lovely homes, and some sections of that district are considered the most desirable of the districts where houses can be rented. Baring street, Thirty-second, Thirty-third, up to Forty-first street, Powelton avenue, are all elegant neighborhoods, where houses are semi or altogether detached. Most of them have front, side and rear yards, with vines, trees, many of them very large with splendid foliage, stone walls, iron fences, streets and sidewalks both paved, all sewered, cleaned, painted and in good condition. It is true there are in that district some cheap neighborhoods, where the pig and the pig weed, the goat and the tin can, and ragged, dirty children flourish. There are other streets where houses are built in long rows, which are rattle traps and tumble-downs. Many of these houses were built before the Centennial of 1876, or immediately afterward. They were, many of them, contract houses and look as though a blight had suddenly fallen on them,

But if F. H. will take the same kind of a house, as to finish, neighborhood, sewerage, pavements, etc., and compare it with her "cozy Pittsburg homes," she will probably find that she will have to fall back on to the larger wages paid to mechanics in Pittsburg. As a rule, a mechanic can live cheaper East than he can in Pittsburg on the same wages. But a mechanic as a rule cannot live on Baring or Thirty-second streets or other such places. Rents are high there as they would be on Hiland, Fifth, Ellsworth (below Roup), Penn avenues or Craig, Neville and other high-toned streets in Pittsburg. A house on a paved and sewered street, with trees along the sidewalks, painted and in good condition in Pittsburg costs money to even look at. Few would wish to rent such a property under 10 per cent of its value, which with the taxes off would net about 8 per cent, and the tenant in all cases pays the water rent, which is always paid by the landlord in the East. The same money that is paid as rent and water rent on an unpaved, unsewered street in Pittsburg for a detached house, with a good view from bow windows, will bring a much finer house on a paved street in Philadelphia.

HOW THE RENTS COMPARE.

The long, drawn-out houses in Philadelphia spoken of by F. H., with the shelf of wood or marble for a mantel piece, and the hot air registers throughout the house, cost from $18 to $25 per month, but the same house in Pittsburg would cost and do cost from $30 to $40 and the water rent. Take for instance in the neighborhood of Penn and Winebiddle avenues. Four brick houses on a lot 56x100, of six rooms, rent for $18 per month each; another lot of 50x110 has three brick houses on it, each of five rooms, and they rent for $16 each per month. Out Penn avenue, near Negley avenue, are two frame houses on a lot 25x60 of four rooms each, renting for $11 per month and water rent besides. Few really desirable houses in the East End on a paved or unpaved street can be had for less than $500 per year and about $22 water rent. It is a contention I would submit with confidence that a far superior house cannot be had in Northwest or even on Baring street or West Philadelphia for the same or less money.

The drainage of Pittsburg or its lack of sewerage has been its great drawback for many years. Philadelphia has 300 miles of sewerage. There can be no comparison there.

Natural gas is a great fuel, and no doubt Philadelphians would be glad to have it on account of its superior cleanness, and decrease of labor in the matter of ashes and carrying coal. But on account of economy, they would find their gas bills would nearly, if not quite, equal their coal bills, so that this would not be an element of cheapness. The rosy days when a person could destroy all of the gas his burners would consume have about come to an end, and the meter comes to the front with its tales of large and extravagant consumption, while the head of the house will be constantly on the lookout to stop waste, which means extravagance and large bills. People who have heretofore kept their houses too hot may, even in the desire for economy, go a little to the other extreme, so "comfortable, cozy homes" mentioned by F. H., may by next winter be about as cool as her Philadelphia house, heated by register, was.

As to the quality of the water there cannot be any difference between the Philadelphia and the Pittsburg supply in rainy weather. Both are about as bad as they can be, only in Philadelphia the muddy water slips down easy, while a person in Pittsburg occasionally chews sand for some time after using.

AS TO TRANSPORTATION.

Pittsburg cable cars are much better than the Philadelphia cars, because they have a system of double trucks, one under each end of the car, while the Philadelphia cars have only one truck of four wheels under the center of the car, which causes occasionally a disagreeable rocking motion. Their new cars, however, are of the double-truck kind. The fares in Pittsburg, however, are not so favorable to the poor man or mechanic.

If a man has to take two railroads he will be compelled to pay full fare twice. Even on the Hiland avenue "Buss," which is a branch of the Pittsburg traction line, they will not give anywhere in Pittsburg a transfer check onto another road, while in Philadelphia a man can ride down Columbia avenue and exchange to the lower part of the city, seven or eight miles for five cents. He can ride from West Philadelphia to Kensington, nine miles, for eight cents. He can in short exchange in almost any direction for mostly one fare, sometimes a fare and a half. The fares on the steam railroads are also cheaper East than here, while all the bridges are free.

As to the markets of Philadelphia, which F. H. does not seem to appreciate, they are not excelled by London or New York. The latter may be equal, but not superior. Aside from the general run of vegetables and meats, the necessities of life, the luxuries and delicacies can be had in their season of the finest quality. The position of the Eastern markets on the sea coast makes all seasons almost alike, for when our winter is on, the Bermuda, Florida and Georgia gardens furnish the markets, so that they are almost perpetual. The great pasturage of wild celery throughout the lower river inlets and the Delaware Bay, Chesapeake Bay and the swampy country between them furnish fine pasturage for all kinds of aquatic fowl and reed birds. The reed bird gets very fat and is killed in vast numbers. It is a common sight to see men and boys going around the streets inside of a hoop, around which are strung probably 100 plucked birds. The reed bird is called in the Northern States the bobolink, in the South the rice bird and in the West Indies the cutter bird and is esteemed a luxury everywhere.

GOOD DUCK-HUNTING.

Ducks—who is it that don't like a nicely cooked duck, and who is it that don't like to hide himself all day in a boat or swamp to get a crack at a flock? It is a ludicrous sight in duck season to watch the heads of duck hunters and their guns sticking out of the railroad bridges between Philadelphia and Baltimore, waiting for the duck, and dodging the trains. Boats on the water with hunters, men and guns lying on the banks behind all kinds of screens while the water has patches of decoys at which greenhorns pop their guns on sight. But if there are plenty of hunters, there are myriads of ducks, canvasback, black ducks, mallard, teal, redheads, snipe, rail, all of them come and of course the market is stocked with them. No person but the true duck hunter, sportsman, or the gourmand properly appreciate the juiciness and gamey flavors of a wild duck.

A visit to the Spruce street wharf where the oyster boats land is also a sight which should not be neglected by those who love the delicious bivalves. Sloops, smacks and vessels of smaller size come in there loaded with the finest oysters to be had from the different beds. Absecon Salts, Morris River Coves, Chincoteagues, Cape Mays, Blue Points, etc. Very few people know the delicious flavor of an oyster fresh from his native bed taken out of his shell on an oyster smack.

The shad fisheries are another great sight down at Gloucester, on the Jersey side. Crowds go down on the ferry from South street to see the hauling of the seine, which is nearly a mile long, filled with the sparkling, leaping shad and herring. When the shad season comes in the butchers suffer. Sheepshead and bluefish are brought from the sea, and are very popular.

Catfish are quite numerous and are in great favor. A drive up the Wissahickon without a catfish and waffle supper at one of the many hotels along the road is not to be thought of.

Luscious peaches, plums and pears from Maryland and Delaware are not to be excelled in any market. Canteloupes of so sweet and luxurious a flavor that the West Indies cannot compete with them come from Maryland and Jersey, and in such quantities that they sell during the season at 25 cents per crate.

Dairy and poultry supplies come from the richest dairy counties in the world. Bucks, Montgomery, Chester, Delaware, Lancaster can't be beaten in their butter and poultry. Many people pay $1 per pound the year around to get a particular brand of butter.

Many farmers are butchers and dress their meats at home, and sell their produce and meats in the market stall themselves instead of the hucksters, thus making marketing so much cheaper by avoiding the middlemen.
BUMBALO.

Recent Patents to Pennsylvanians.
Higdon & Higdon, patent lawyers, 95 Fifth ave., Pittsburg, and St. Cloud building, opp. Patent Office, Washington, D. C., report the following patents granted last week: Pittsburg—E. R. Graham, brush; J. Guest, rolling forge bars; J. Pedder, utilizing worn-out railway tires; A. Schmid, electric machine. Allegheny—T. H. Campbell, dumb-bell. Minersville—A. H. Dunn, puzzle. McKeesport—P. Patterson, tube welding apparatus.

PIANOS AND ORGANS AT SACRIFICE.

Prices Before Removal to Fifth Avenue.
At Henrick's Temple of Music.
Intending to occupy the remodeled room 79 Fifth avenue after January 1, and desiring to move as little stock as possible, prices on new and second-hand instruments have been reduced so that buyers can save from $75 to $150 on new pianos and from $40 to $75 on organs. New pianos for $250, worth $400; organs for $75, worth $150; second-hand pianos from $40 to $150, worth twice as much; second-hand organs worth $35 to $65.
The stock embraces such celebrated makes as Chickering & Sons, Wheelock & Co., Hallet & Davis, Steinway & Sons, Knabe, Decker & Sons, Stuyvesant and Demarest pianos and Farrand & Votey, Estey, Kimball, Wilcox & White, Shoninger and Burdett organs.
Over 150 pianos and organs to select from, and buyers should come early to have the choice. Instruments selected for holiday presents will be set aside and delivered at desired time. Easy payments arranged. Store open until 9 o'clock evenings until January 1. Remember the place and call early.
HENRICK'S TEMPLE OF MUSIC,
435 Wood street,
Between Fifth ave. and Diamond st.
8,15,19,22

Reduction in Passenger Rates Via the Pennsylvania Railroad.
For the better accommodation of its patrons the Pennsylvania Railroad Company will, on and after Sunday, 8th inst., reduce the passenger rates between Pittsburg, Washington and Baltimore to $8 for first-class tickets and $7 for second-class tickets.
This company is running four trains between Pittsburg, Washington and Baltimore daily—7:15 and 8:00 A. M., and at 7:15 and 8:10 P. M., with Pullman sleeping and parlor cars attached.

Marked Down From Thanksgiving.
A few more gallons left of those rare old sherries, hock ports, cognacs, etc. These are rare bargains. Come and get your name down in the blue book for Christmas gifts at John McCullough's cable car corner, 523 Liberty street, foot of Fifth avenue.

JAPANESE WARE BAZAAR.
Open for the Holidays Only.
You will wonder at our fine display. Goods are going rapidly, and we would advise you to call early. Special discounts on large pieces.
Store open till 9 P. M. until Christmas.
WM. HASLAGE & SON,
Select Family Grocers,
18 Diamond Square, Pittsburg.

ATTEND our holiday and clearing sale for bargains and holiday presents.
TTSSu HUGUS & HACKE.

BLAIR'S PILLS—Great English gout and rheumatic remedy. Sure, prompt and effective. At druggists. TTSu

Substantial Holiday Presents.
Seal plush sacques, plush and cloth jackets, newmarkets and children's wraps. Large and carefully selected stock and lowest prices at H. J. Lynch's, 438 and 440 Market st.

WAINWRIGHT'S beer leads in favor. All best dealers keep it. Families supplied direct on short notice. Telephone 5525.
WSu

MARBLE, onyx and bronze clocks, lowest prices, at Hauch's, No. 295 Fifth ave.
WFSU

TEN POUNDS
IN
TWO WEEKS
THINK OF IT!
As a Flesh Producer there can be no question but that
SCOTT'S
EMULSION
Of Pure Cod Liver Oil and Hypophosphites
Of Lime and Soda
is without a rival. Many have gained a pound a day by the use of it. It cures
CONSUMPTION,
SCROFULA, BRONCHITIS, COUGHS AND COLDS, AND ALL FORMS OF WASTING DISEASES. AS PALATABLE AS MILK.
Be sure you get the genuine as there are poor imitations.
OCS-D-WFSU

NEW ADVERTISEMENTS.

MARVELOUS. WONDERFUL.

CHRISTMAS :: EXHIBITION
-AT-
KEECH'S
POPULAR CASH AND CREDIT HOUSE.

Though Christmas is yet over two weeks off, Old Santa has already put in an appearance at Keech's, and his presence is being seen and felt all through the spacious salesrooms. What a change! What a transformation! What a metamorphosis! You'll be surprised and delighted on taking a stroll through the various floors. Keech's Christmas show is certainly the most extensive, comprehensive and ::: elegant
THAT EVER FASCINATED THE EYES OF A PITTSBURG PUBLIC.

ODD PARLOR CHAIRS.
So many of them that nearly the entire second floor had to be given up for their display. And such a display! No pen or tongue can do it justice. It must be seen. Suffice it to say, then, that it embraces scores upon scores of entirely new things in Rockers, Arm and Reception Chairs, covered with the choicest and finest Marbleized Silk Plushes, Velour Plushes, Crushed Plushes, Tapestry and Leather. From this gigantic variety the most fastidious taste can easily be suited.

MORE ODD CHAIRS.
Suitable for the Sitting Room, Library or Chamber. They are displayed on the first floor and you'll see them on entering. Many beautiful novelties among them. Your special attention is called to the magnificent embossed leather back Chairs, with straw design leather seats. It's hard to think of a more suitable, useful, sensible and inexpensive Christmas gift than one of these very chairs. And, if you are shrewd, you'll not tarry long, but make your selection now while the assortment is brimful of new things.

CHRISTMAS SUGGESTIONS.
Keech's stock is full of them; here are a few. Come and see them:
LADIES' SHOE STOOLS. A very low Silk Plush Chair; just the thing required by ladies while buttoning or lacing their shoes.
CHILDREN'S ROCKERS. Make the little ones happy by presenting them with the beautiful little Rockers that we now display.
CENTER TABLES, SOFAS, CABINETS.
All kinds and descriptions, from the cheapest to the costliest. Something for every pocket and taste.
FOLDING BEDS, WARDROBES, CHIFFONIERS, DESKS, SECRETARIES.
Here are beautiful presents for father and mother, husband and wife. Don't fret about the prices. They will surely suit you.
HALL STANDS, HAT RACKS, UMBRELLA STANDS SHAVING STANDS, BLACKING CASES, MEDICINE CHESTS, FOOT STOOLS.
These articles cost but little, but the joy and pleasure they give to those whom you present them to on Christmas eve is immense. There's a full variety of them at Keech's, and you are cordially invited to call and inspect them.
BOOK CASES, EASELS, PEDESTALS, CLOCKS, BRONZES, FIGURES, CHEVAL MIRRORS, etc., etc.
There may be dozens of stores in this city offering these goods, but none can approach Keech's popular prices. Call and see how easily we can substantiate this statement.
SILVERWARE. ::: SILVERWARE.
Here is a good list of handsome Christmas gifts:
Silver Tea Sets, in four or five pieces; Silver Water Sets, Silver Cups, Silver Butter Dishes, Silver Pickle Castors, Silver Pepper and Salt Sets, Silver Napkin Rings, Silver Tea and Table Spoons, Silver Knives and Forks, Carving Knives.
CHINA DINNER, TEA and TOILET SETS.
A complete stock of these goods now on exhibition and sale in our House Furnishing Goods department—fifth floor. Take the elevator.
CLOAKS and CLOTHING.
The usual bargains will be offered in these departments this week. The latest styles and best qualities are here.

NOTE: STORE OPEN EVERY NIGHT.
For the accommodation of those, who, being at work all day, are compelled to do their buying in the evening, we will keep our store open till 9 o'clock every night until Christmas, and till 10 o'clock on Saturdays, as usual.

KEECH'S
Cash and Credit House,
923 and 925 Penn avenue,
Near Ninth Street.
Open Saturday Nights till 10 o'clock.