THE
"CLEARFIELD REPUBLICAN."
ESTABLISHED IN 1827.

The largest circulation of any Newspaper in North Central Pennsylvania.

Terms of Subscription.

If paid in advance, or within 3 months....$2 00
If paid after 3 and before 6 months..... 2 50
If paid after the expiration of 6 months... 3 00

Rates of Advertising.

Transient advertisements, per square of 10 lines or less, 3 times or less.....$1 50
For each subsequent insertion..... 50
Administrators' and Executors' notices..... 2 50
Auditors' notices..... 2 50
Caution and Estrays..... 1 50
Dissolution notices..... 2 00
Local notices, per line..... 15
Obituary notices, over five lines, per line..... 10
Professional Cards, 1 year..... 5 00

YEARLY ADVERTISEMENTS.

1 square.....$8 00 | 1 column.....$35 00
2 squares.....15 00 | ½ column.....45 00
3 squares.....20 00 | 1 column.....80 00

Job Work.

BLANKS.

Single quire.....$2 50 | 6 quires, pr. quire, $1 75
2 quires, pr. quire, 2 00 | Over 6, per quire, 1 50

HANDBILLS.

½ sheet, 25 or less, $2 00 | ½ sheet, 25 or less, $3 00
1 sheet, 25 or less, 3 00 | 1 sheet, 25 or less, 10 00

Over 25 of each of above at proportionate rates.

GEO. B. GOODLANDER,
Editor and Proprietor.

Cards.

WM. J. MCCULLOUGH.....DAVID L. KREBS.

McCULLOUGH & KREBS,
ATTORNEYS AT LAW,
(Office adjoining the Clearfield County Bank, 2d St.,
Clearfield, Penn'a.
All legal business promptly attended to. Consultations in both English and German.

H. W. SMITH,
ATTORNEY-AT-LAW,
Clearfield, Pa. 1y

WILLIAM A. WALLACE,
ATTORNEY AT LAW,
Clearfield, Pa.
Legal business of all kinds promptly and accurately attended to. [way15-y

A. W. WALTERS,
ATTORNEY AT LAW,
Clearfield, Pa.
Office in the Court House. [dec3-1y

ISRAEL TEST,
ATTORNEY AT LAW,
Clearfield, Pa.
Office in the Court House. [jy11,'67

JOHN H. FULFORD,
ATTORNEY AT LAW,
Clearfield, Pa.
Office on Market St., over Hartswick & Irwin's Drug Store.
Prompt attention given to the securing of Bounty, Claims, &c., and to all legal business. March 28, 1867-1y.

WALTER BARRETT,
ATTORNEY AT LAW.
Office on Second St., Clearfield, Pa. [nov21,66

JOHN L. CUTTLE,
ATTORNEY AT LAW
And Real Estate Agent, Clearfield, Pa.
Office on Market street, opposite the jail.
Respectfully offers his services in selling and buying lands in Clearfield and adjoining counties; and with an experience of over twenty years as a surveyor, flatters himself that he can render satisfaction. [feb28,'63-tf

WM. M. McCULLOUGH,
ATTORNEY AT LAW,
Clearfield, Pa.
Office on Market street one door east of the Clearfield County Bank. [may4,'64

John H. Orvis. C. T. Alexander.
ORVIS & ALEXANDER,
ATTORNEYS AT LAW.
Bellefonte, Pa. [sep13,'65-y

E. I. KIRK, M. D.,
PHYSICIAN AND SURGEON,
Luthersburg, Pa.
Will attend promptly to all professional calls. aug18-1ypd

DR. AI THORN,
PHYSICIAN & SURGEON,
HAVING located at Kylertown, Clearfield co., Pa., offers his professional services to the people of the surrounding country. [Sept. 29,'69-y

DR. T. JEFFERSON BOYER,
PHYSICIAN AND SURGEON,
Second Street, Clearfield, Pa.
Having permanently located, he now offers his professional services to the citizens of Clearfield and vicinity, and the public generally. All calls promptly attended to. oct29-y

F. B. REED, M. D.,
PHYSICIAN AND SURGEON,
Having removed to Williamsgrove, Pa., offers his professional services to the people of the surrounding country. [jy11,'67

DR. J. P. BURCHFIELD,
Late Surgeon of the 53d Regiment, Pennsylvania Volunteers, having returned from the Army, offers his professional services to the citizens of Clearfield county.
Professional calls promptly attended to. Office on Second street, formerly occupied by Dr. Woods. [apr4,'66-tf

DR. J. F. WOODS,
PHYSICIAN & SURGEON.
Having removed to Ansonville, Pa., offers his professional services to the people of that place and the surrounding country. All calls promptly attended to. [Dec. 2 6m pd.

DR. S. J. HAYES,
SURGEON DENTIST.
Office on Main St., Curwensville, Pa.,
WILL make professional visits, for the convenience of the public, commencing in April, 1869, as follows, viz:
Luthersburg—First Friday of every month.
Ansonville—First Monday of every month.
Lumber City—First Thursday of every month.
Spending two days in either place. All orders for work should be presented on the day of his arrival at each place.
Teeth extracted by the application of local anæsthesia comparatively without pain. All kinds of Dental work guaranteed.
N. B.—The public will please notice, that Dr. H., when not engaged in the above visits, may be found in his office, in Curwensville, Pa.
Curwensville, Feb. 4, 1869. [8-42

DENTAL PARTNERSHIP.
Dr. A. M. HILLS,
Desires to inform his patrons, and the public generally, that he has associated with him in the practice of Dentistry,
S. P. SHAW, D. D. S.,
who is a graduate of the Philadelphia Dental College, and therefore has the highest attestations of professional skill. All work done in the office I will hold myself personally responsible for being done in the most satisfactory manner and highest order of the profession.
An established practice of twenty-two years in this place enables me to speak to my patients with confidence.
Engagements from a distance should be made by letter a few days before the patient designs coming. [June 4, 1868-1y.

BUY the DEMOCRATIC almanac. Only 20 cents. Every voter should have one.

CLEARFIELD REPUBLICAN.

GEO. B. GOODLANDER, Proprietor. PRINCIPLES; NOT MEN. TERMS—$2 per annum, in Advance.

VOL. 42—WHOLE NO. 2145. CLEARFIELD, PA., WEDNESDAY, DECEMBER 1, 1869. NEW SERIES—VOL. 10, NO. 20.

Cards.

JEFFERSON LITZ,
PHYSICIAN & SURGEON,
HAVING located at Osceola, Pa., offers his professional services to the people of that place and surrounding country.
All calls promptly attended to. Office and residence on Curtin st., formerly occupied by Dr. Kline. my19-1y

DR. M. L. KLINE,
SURGEON DENTIST.
HAVING located in Wallaceton, Clearfield county, Pa., offers his professional services to the people of that place, and the surrounding country. All work guaranteed, and charges moderate. [oct.12, '69-tf.

J. H. KLINE, M. D.,
PHYSICIAN & SURGEON,
HAVING located at Pennfield, Pa., offers his professional services to the people of that place and surrounding country. All calls promptly attended to. oct. 13 tf.

AUCTIONEER.
THE undersigned will attend to the calling and crying of sales anywhere within the limits of Clearfield county, on short notice. Charges reasonable. Address CHARLES H. RENSEL, n24-3mpd Smith's Mills, Clearfield Co., Pa.

CHARLES SCHAFER,
LAGER BEER BREWER,
Clearfield Pa.
HAVING rented Mr. Entres' Brewery he hopes by strict attention to business and the manufacture of a superior article of BEER to receive the patronage of all the old and many new customers. Aug. 25, tf.

THOS. S. WASHBURN,
SCALER OF LOGS,
Glen Hope, Clearfield County, Penn'a.
THE subscriber has devoted much time and attention to the SCALING OF LOGS, and takes this method of offering his services to those who may need them. Any further information can be had by addressing as above. je26-tf

SURVEYOR.
THE undersigned offers his services as a Surveyor, and may be found at his residence, in Lawrence township. Letters will reach him directed to Clearfield, Pa.
may 7-tf. JAMES MITCHELL.

THOS. W. MOORE,
Land Surveyor and Conveyancer,
HAVING recently located in the borough of Lumber City, and resumed the practice of Land Surveying, respectfully tenders his professional services to the owners of and speculators in lands in Clearfield and adjoining counties.
Deeds of conveyance neatly executed.
Office and residence one door east of Kirk & Spencer's store. apr14-p4m.

DANIEL M. DOUGHERTY.
BARBER & HAIR DRESSER,
SECOND STREET,
jy23] CLEARFIELD, PA. [tf

N. M. HOOVER,
Wholesale & Retail Dealer in
Tobacco, Cigars and Snuff,
Two doors east of the Post Office,
MARKET STREET, CLEARFIELD, PA.
A large assortment of Pipes, Cigar Cases, &c., always on hand. my19-1y

J. K. BOTTORF'S
PHOTOGRAPH GALLERY,
Market Street, Clearfield, Pa.
NEGATIVES made in cloudy, as well as in clear weather. Constantly on hand a good assortment of FRAMES, STEREOSCOPES and STEREOSCOPIC VIEWS. Frames, from any style of moulding, made to order. apr28-tf

REUBEN HACKMAN,
House and Sign Painter and Paper Hanger,
Clearfield, Penn'a.
Will execute jobs in his line promptly and in a workmanlike manner. apr4,67

J. BLAKE WALTERS,
SCRIVENER AND CONVEYANCER,
Agent for the Purchase and Sale of Lands.
Clearfield, Pa.
Prompt attention given to all business connected with the county offices. Office with Hon. Wm. A. Wallace. [jan1, 66-tf

THOMAS H. FORCEE,
DEALER IN
GENERAL MERCHANDISE,
GRAHAMTON, Pa.
Also, extensive manufacturer and dealer in Square Timber and Sawed Lumber of all kinds.
Orders solicited and all bills promptly filled. [jy16-1y

GEO. ALBERT.....HENRY ALBERT.....W. ALBERT
W. ALBERT & BROS.,
Manufacturers & extensive Dealers in
Sawed Lumber, Square Timber, &c.,
WOODLAND, PENN'A.
Orders solicited. Bills filled on short notice and reasonable terms.
Address Woodland P. O., Clearfield Co., Pa.
je23-1y W. ALBERT & BROS.

FRANCIS COUTRIET,
MERCHANT,
Frenchville, Clearfield County, Pa.
Keeps constantly on hand a full assortment of Dry Goods, Hardware, Groceries, and everything usually kept in a retail store, which will be sold for cash, as cheap as elsewhere in the county.
Frenchville, June 27, 1867-1y.

C. KRATZER & SONS,
MERCHANTS,
DEALERS IN
Dry Goods, Clothing, Hardware,
Cutlery, Queensware, Groceries, Provisions and Shingles.
Clearfield, Penn'a.
At their new store room, on Second street, near Merrell & Bigler's Hardware store. [jn14

MOSHANNON LAND & LUMBER CO.,
OSCEOLA STEAM MILLS,
MANUFACTURES
LUMBER, LATH, AND PICKETS
H. H. SHILLINGFORD, President,
Office—Forest Place, No. 125 S. 4th st., Phil'a.
JOHN LAWSHE, Superintendent.
je8'67] Osceola Mills, Clearfield county, Pa.

ADMINISTRATOR'S NOTICE.—Notice is hereby given that letters of administration on the estate of WM. McKNIGHT, deceased, late of the borough of Clearfield, Pennsylvania, having been duly granted to the undersigned, all persons indebted to said estate will please make payment, and those having claims or demands will present them properly authenticated for settlement. GEO. C. PARSMORE, Administrator.
Oct. 27, '69-6t.

BROWN SEA BREEZES, at Mrs. Watson's.

ESTRAY.—Came trespassing on the premises of the undersigned, in Morris township, about the last of September, 1869, a RED STEER, with white spots on forehead, hips and tail, and having long slim horns; he is supposed to be about three years old. The owner or owners are requested to come forward, prove property, pay charges, and take him away, or he will be disposed of as the law directs. DAVID DALE.
Morris township, Nov. 18, 1869-3pd.

THE REPUBLICAN.

CLEARFIELD, PA.

WEDNESDAY MORNING, DEC. 1, 1869.

THE TOAST FOR LABOR.

Here's to the man with horny hand,
Who tugs at the breathing bellows;
Where anvile ring in every land,
He's loved by all good fellows.

And here's to him that goes afield,
And through the glebe is plowing,
Or with stout arms the ax doth wield,
While ancient oaks are bowing.

Here's to the delver in the mine,
The sailor on the ocean,
With those of every craft and line,
Who work with true devotion.

Our love for her who toils in gloom,
Where cranks and wheels are clanking!
Bereft is she of nature's bloom,
Yet God in patience thanking.

A curse for him who sneers at toil,
And shuns his share of labor;
The knave but robs his native soil,
While leaning on his neighbor.

Here may this truth be brought on earth,
Grow more and more in favor;
There is no wealth but owes its worth
To handicraft and labor.

Then pledge the founders of our wealth—
The builders of our nation;
We know their worth, and now their health
Drink we the acclamation.

SYNOPSIS OF COUNTY INSTITUTE.

The Teachers' Institute of Clearfield county, convened in the public school house, at Curwensville, on Tuesday, October 12th, at 1½ o'clock, P. M. George W. Snyder, County Superintendent and *ex-officio* President of the Institute, urged upon the teachers, if they would make the Institute instructive to themselves, to come forward and take an active part in its proceedings. Mr. Joseph Spencer, of Pike township, was then introduced, who entertained the audience for a considerable time, speaking of the teacher's duties and responsibilities. "Application of Square Root," by Mr. M. Clark. On motion, the hours of meeting were fixed as follows: Open at 9 a. m., and close at 12; open at 1½ p. m., and close at 4½, and open at 7 in the evening. Adjourned.

TUESDAY EVENING.—Mr. M. L. Gulich lectured on Reading. Mr. J. S. Smith lectured on Geology. Select reading by Mr. Gulich. Adjourned.

WEDNESDAY MORNING.—Discussion, "What disposition should a teacher make of his time out of school hours?" Participated in by many of the teachers. Lecture on Penmanship, by Mr. C. E. Cady, of New York. He said: "The principles should be well understood before an attempt be made to form letters. That system should be chosen which is easiest understood. The pupil should commence the study at a very early age. Let the teacher make the principles upon the board and the young pupil imitate them upon his slate. Great care should be taken in the selection of the material the pupil is allowed to use. Writing should be taught in classes, the same as any other branch of study, and the teacher should allow no *number* higher than number *three* of any system to be used—which is supposed to include all the principles of any system—also, to assist his pupils in criticising his writing." Mr. Gulich continued his lecture on Elocution, dividing it into articulation, emphasis, inflection and tone. Lecture on "Animated Nature," by Mr. C. C. Shultz. Adjourned.

WEDNESDAY AFTERNOON.—Lecture on the topics of Geography, by Mr. F. W. A. Shultz. Essay, by Mr. Nathan Comstock. Class-drill in writing, by C. E. Cady. Age questions, by Geo. W. Snyder. Select reading, by Miss Clara Leonard. Discussion, "How shall we secure better attendance of children in our schools?" After being thoroughly discussed, is was generally thought the best way to operate was by decorating and otherwise rendering the school room agreeable to the pupil, so that he might regard it as a place of pleasure rather than a prison, and by interesting the parents in the work of the school, and making *them* understand the importance of regular attendance by their children. Adjourned.

WEDNESDAY EVENING.—Public reading entertainment by Mr. M. L. Gulich. Notwithstanding the admission fee of twenty-five cents, the school room was crowded, and the audience was, perhaps, the largest of the session, except on Thursday night. The readings were excellent, and gave evidence of careful study. The vocal music, led by Miss V. S. Boucher, was also one of the best features of the entertainment.

THURSDAY MORNING.—Application of Cube Root, by Mr. E. Wilson. Discussion, "Should teachers' salaries be uniform? If not, what should be the basis for fixing them?" It was generally thought they should not, and the only true criterion for fixing them by directors, was the grade of certificates. Essay, by Miss Shipton. Select reading, by Mr. Gulich. The following committee was appointed on finance: A. V. Dougherty, George Cole and C. C. Shultz. Adjourned.

THURSDAY AFTERNOON.—Mr. E. G. Hays gave instruction on the verb. Essay, by Miss Cecelia Leonard. Mr. W. S. Luther gave instruction on Longitude and Time. Class-drill in writing, by Mr. C. E. Cady. Address, "Education in Clearfield," by F. W. A. Shultz. Essay, by Miss Clara Barrett. The President appointed the following committee on resolutions: Mr. Nathan Comstock, Mr. McGovern and Miss D. Read. Adjourned.

THURSDAY EVENING.—Lecture, by F. W. A. Shultz. Music. Lecture on "Popular Education," by Hon. J. P. Wickersham, State Superintendent. He said: I did not come with a prepared or flowery speech, but intend to tell you, in the plainest Anglo Saxon I can master, your duties. You have some curiosities that should be purchased, by subscription, and preserved in the scholastic cabinet of the county. I mean those old log school houses and their defective apparatus, which prejudice the minds of your children, and what should be the happiest, are the most detested hours of their lives. He said it was just as essential to have apparatus in the school houses for teachers to use, as it was for a carpenter to have tools. If directors fail to perform their duties in this, as well as any other respect, the people should see that men were elected who would do their whole duties, irrespective of any outside influence. Mr. Wickersham spoke an hour and a half, to a very large audience. If all the directors of the county had been present, they would have learned that they were, in a great measure, responsible for the defects of the school system in this county. Lecture, by Mr. W. H. Prideaux. Subject, "In what does our liberty consist, and how should it be preserved?" Music. Adjourned.

FRIDAY MORNING.—Mr. Gulich gave a class drill in Articulation. On motion, the regular business was suspended for half an hour, and Hon. J. P. Wickersham lectured on the Art of Teaching. Class-drill in writing, by Mr. Cady. Essay, by Miss McGovern. Mr. Kirk, of Edinboro, was called for, and the gentleman delivered a lively and spirited address. Adjourned.

FRIDAY AFTERNOON.—Mr. J. W. Corp gave instructions on common fractions. Select reading, by Mr. W. H. Prideaux. Essay, by Mr. George Cole. Mr. J. S. Smith gave instruction on the globe.

The annual election resulted as follows: Vice Presidents, Messrs. M. L. Gulich and J. S. Smith. Recording Secretary, Mr. J. W. Schofield. Treasurer, Mr. George W. Cole. Committee of Permanent Certificates, J. S. Smith, W. H. Prideaux, F. W. A. Shultz, Miss Clara Barrett and Miss Hattie Swan. The following appointments were made by the President: Examining Committee, E. G. Hays, M. L. Gulich, Miss E. J. McGovern and Miss Hattie Swan. Committee of Arrangements, Miss Mary Walters, Miss Louisa Heisey and J. W. Corp.

Select reading, by Mr. Rishel. Adjourned.

FRIDAY EVENING.—Oration on Happiness, by Mr. W. H. Prideaux. Select reading, by E. G. Hays. Oration, "Washington at Valley Forge," by Mr. Rishel. Committee on Resolutions reported the following:

Resolved, That we extend our thanks to Hon. J. P. Wickersham, C. E. Cady, Esq., Mr. Kirk, Mr. Spencer, of Pike township, and Miss V. S. Boucher, for services rendered during the week.

Resolved, That we believe it to be the duty of every teacher in Clearfield county to take a copy of the *School Journal*.

Resolved, That the teachers who have wilfully absented themselves from our Institute, deserve the undivided censure of all, for manifesting so little professional interest.

Resolved, That the teachers believe that the interests of our common schools demand that the length of our present school term should be extended to six months.

Resolved, That Webster's Unabridged Dictionary should be found in every school room—placed there by the local school board, at the expense of the district.

Resolved, That a course of professional reading is essential to the greatest success of every true teacher.

Resolved, That we extend our thanks to the citizens of Curwensville for their kindness and hospitality during our stay in their town.

Resolved, That Superintendent Geo. W. Snyder has our hearty approval for advancing the work of education in this county.

Resolved, That we pledge ourselves to make the next Institute the largest and most interesting ever yet held in this or any other of the northwestern counties.

Select reading, by Mr. M. L. Gulich. Adjourned.

No doubt a great mistake was made in holding the Institute the week of the election. Sixty-five teachers, however, were present. All appeared to be highly delighted with its success. The citizens spoke in a praiseworthy manner of the proceedings, and many good wishes were exchanged for each others success.

FORMATION OF COAL.

The following are the remarks of Mr. J. S. Smith, on the formation of Coal, delivered before the Teachers' Institute, at Curwensville, as referred to in the foregoing proceedings:

I have considered at some length, the different series of rocks in their ascending order, from the Azoic to the Carboniferous or Coal System; and I shall touch more minutely upon some systems of rocks above the Coal Formation. Before proceeding further I will remark, that though we may find ample fields for investigation among the rocks of the Old Red Sandstone, that we may view with wonder the impressions of the *Brontozoum Giganteum* and *Otozum Moodi* in the valley of the Connecticut; that the skeletons of these mammoth cetaceous pachyderms and batrachians found in this and other countries, appear almost incredulous, yet in point of wonder and admiration the Carboniferous System stands superior to all.

The age of coal is represented in nearly every country of the globe, and though the rocks of this system exist in some countries, and not any, or but very little true coal is found among them, as in Russia, yet there is no gift of the Creator so manifold as the universal diffusal of coal.

Coal is of vegetable origin, and was made in by-gone ages, by the growth and decay of vegetable matter, very nearly similar to the manner soil is formed in our forests at the present time, only on a more gigantic scale, as I shall have occasion to explain hereafter. The preceding ages contained a predominance of animals—and strange to say—in this formation, vegetables decidedly predominate, and here ends the life of a species of animals—the Trilobites that formerly existed, and have never again appeared.

We may have some idea of the vegetation of that period, when we consider that there are only fifty species of the first class of acrogens, namely, Ferns, indigenous to the Northern States of our Union, and three hundred species have been obtained from the Coal Formation. The plants are not represented by Ferns alone, but by Asterophyllites, Calamites, Lepidodendra, Sigillaria and many others. It is not uncommon to find Lepidodendra three hundred feet in length, and in the rocks of Carbondale, Pa., the remains of one shows that it must have been seventy-five feet in height, and two feet in diameter. Sigillaria often remain upright, and in such cases they retain their original circular form, as they are found in the different seams of Nova Scotia.—Sometimes the woody portion has decayed, and by the immense pressure of over-lying rocks the bark is pressed together, and forms two layers of pure thin coal. It is very hard to assign this last species of plants a true position in any botanical division, and yet they form the main body of the vegetation of that period. The roots of this species of trees have been described under the name of Stigmaria, as they were believed to constitute a distinct plant. But in many instances the root and the stem have been found in a very good state of preservation, and being in contact proves beyond a doubt, the unity of the parts as one plant. Besides the species of animals found in the rocks of the preceding ages, there are many species unknown to them, and one genera of articulates the Trilobites though found in abundance in the Silurian and Devonian Systems, occur here only in a few species, whilst above this not a single species occur, as I before mentioned.

Notwithstanding the many fossil plants and animals that have been found in this formation, there are not a few who disbelieve the fact that coal is of vegetable origin. For those sceptics we have still more positive proof. If we take a piece of partially charred anthracite coal, and placing under the microscope we find it divided into an innumerable amount of little cells. The portion of the coal forming the cells, is somewhat lighter in appearance, than the matter surrounding it; and being silica is not destroyed by a subjection to a moderate heat. The portion surrounding the cells is carbon, the mainly constituent portion of vegetable existence; and exists almost in a pure state in Plumbago or Black Lead, Bitumen, Charcoal and the Diamond. The latter being pure crystallized carbon. These cells are arranged in ducts that lie side by side, as they did centuries ago in the woody fibre of the plant.—This evidence is not so clear in bituminous coal, it being softer, does not preserve its texture so well. I might say in conclusion of my remarks on the vegetable origin of coal, that anthracite or non-bituminous coal, is almost pure carbon, and bituminous coal contains considerable oxygen and hydrogen. It is the hydrogen in connexion with carbon that produces the flames when it burns; for flame is nothing less than the carburreted hydrogen, which is evolved from coal in our gas works, and conveyed to our houses by means of pipes.

I shall not enter into an explanation of the term mineral to coal, seeing that the latter is of vegetable origin, but will leave that for your own investigation, for you will find that the term is very appropriate from the chemical changes that have occured in the transforming of vegetation into the coal that composes the most important of God's gifts to man.

I remarked that coal was of various degrees of thickness and quality, and shall attempt to give you my explanation of the manner and the time employed in making coal. In the peat bogs which are numerous in this and other countries we have incipient coal beds. They are formed by plants, the principal one being Sphagnum, that grow upward, and by a continual decomposition below, and living extension upwards, bogs are formed very often of great thickness, sometimes exceeding thirty feet. It has been estimated that Massachusetts contains 120 millions of cord, and those bogs cover one-tenth of Ireland, and extend from small collections to immense districts, from ten to fifty miles in length and two to three in breadth. Now these peat bogs need only to be subject to the pressure of rocks, and a little time to develope themselves into true coal beds. For they contain all of the elements, and were it possible for a verticle movement of the portion of the earth's surface that they occupy, they might instantly be subject to inundation, and thereby sufficient matter would in time be deposited over them, as to make them present the same appearance that exists in every seam of coal. Now this is the manner in which coal was formed, only that there were alternate upheavals and depressions at different periods of time, corresponding to the amount of rocks that exist between two successive seams.

Regarding the time that it must have occupied in forming this system, no matter how rapid was the decay and growth of the vegetation, it must not have taken years, but ages. At the present state of growth and decay, Liebeg says: it would require one hundred and seventy years to make one inch in thickness of anthracite coal, and to accumulate a strata of sixty feet, would require a period of one hundred and twenty-two thousand four hundred years. And to accumulate the whole Coal Formation at the same rate, would take such an amount of time that my arithmetic fails in calculating. For we may recollect that this system is nearly three miles in depth, and would require hundreds of billions of years in forming it.

At the close of the Coal Formation, the eastern part of North America was above the ocean, a part composing at least two-thirds of it, while the western part was occupied by a large Mediterranean Sea, such a sea as in the Silurian and Devonian extended over the eastern part also. This vast continent had not that diversity of mountains that render it capable of producing the varied vegetation that now makes it valuable and beautiful. The Rocky Mountains did not yet rear their bold and blackened cliffs to look down on the tenantless waste, nor did our vine-clad Alleghanies stretch along the eastern ledge of our continent, a perpetual barrier to the encroachments to the Atlantic. But now instead of finding the coal on a general level, it forms an angle with the horizon, called the dip, and is located in our mountains or our valleys, conforming in its flexures and foldings with the general surface of our country.

Great Britian has 12,000 square miles of coal-field, the continentt of Europe about 10,000 square miles, while the United States has 200,000 square miles. And from the Report of Prof. H. D Rogers, of Pennsylvania, we find that North America has twenty-one times as much coal as Great Britian.

It has been about a century since anthracite coal was first used in blacksmithing, and about forty years since it came into general use. In 1820 the amount worked in Pennsylvania was only 380 tons. In 1847 the State furnished 3,000,000 tons, and 2,000,000 of bituminous coal. The United States produced in 1857 10,500,000. And it has been calculated that at 12,000,000 produced annually, North America has enough to last 333,333 years.

Qualifications to Keep a Hotel.

It is not every man who can keep a hotel. In fact not one man in a hundred is fit by nature or education to fill so laborious and responsible a position. The old style of taverns of the years agone a man might keep and not hurt him much, providing there was nothing to do but entertain two persons a day, raise garden stuff, take care of a horse, keep a hot fire in the bar room in winter or a cool sert in summer, with an occasional change of water in the rinsing tub, pan, pail or slop-dish.

Hotel-keeping is a science. It requires brain and knowledge of human nature. A man must know his business to keep a hotel successfully.—Folks ain't now as they used to be. They go quicker travel faster, and do not stay so long.

Two thousand miles to-day is no more than twenty miles twenty years ago. Men act differently, think differently, feel differently, are different.

They are bolder, quicker, more reckless, more independent, and less caring for public opinion. They give and require more attention now than then.

There are travelers and stay at homes. There are men who want attention, expect to pay for it, are entitled to it. If they do not find it at home, they do at a hotel, if it is well kept.

And the hotel.

It should be neat, clean, in order. The best should always be given, and in abundance. Then people like to stop there, and are in less mood to hasten away. The table should be neatly set—viands clean, rooms in order with conveniences handy.

And the hotel keeper.

He should be a good natured, social, well informed man of dignity, yet able to give and take a joke. He should know of human nature from contact therewith. He should be a good-hearted man, who can introduce himself to guests, and make old people and timid ones from the country somewhat anused to travel, to city and hotel ways, to feel perfectly at home.

There are those who never stopped at a hotel before—who do not understand just how to act—who are timid in asking for what they want, or for information. The genuine landlord will care for all such with extra attention.

And he should be able to give information about roads, routes, best time to go and come, cost of going, &c. And he should do this without grumbling—as if to do so with pleasure. And he should give more information, never less than asked for.

And he should act as if those who were his guests were ladies and gentlemen, till he knows to the contrary. Should greet them kindly, be not inquisitive, nor yet distant, bold, haughty and stuck up, as if all he wanted was the money.

And he should be in the dining room before and at meal times. A word here and there—a little of this one and that one—a looking to see that all are well served, and the poor waited on with the rich. And then he should speak and act as though his guests were his friends, and be interested in their happiness and comfort. Such men know how to keep hotel. Who of our landlord readers can fill the bill? We know many who can—a few cannot.—*Brick Pomeroy.*

KEEPING POTATOES.—It is a bad plan to place potatoes against the damp walls of a cellar, or to put them in large, deep bins, where they will be likely to gather moisture. If bins are used, the bottom should be made of strips, with small spaces left between, to admit air. Barrels or open boxes are also good, as well as convenient vessels, in which to keep potatoes, and whenever it is necessary to look over and pick out decayed tubers, it is more easily done than when a large number of bushels are placed in one heap or bin. Cellars in which potatoes are kept should not be too light, because it will, as every farmer knows, make them turn green, and injure their flavor and value.—*Hearth and Home.*

WHAT ARE WOMAN'S RIGHTS?—The following lines set forth more beautifully than all the so called advocates of "woman's rights" have been able to do, the exalted prerogatives nature has bestowed upon woman:

The right to wake when others sleep;
The right to watch, the right to weep;
The right to comfort in distress;
The right to soothe, the right to bless;
The right the widow's heart to cheer;
The right to dry the orphan's tear;
The right to feed and clothe the poor,
The right to teach them to endure;
The right, when other friends have flown
And left the sufferer all alone,
To kneel that dying couch beside
And meekly point to Him who died;
The right a happy home to make
In any clime for Jesus' sake;
Rights such as these are all we crave
Until our last—a peaceful grave.

A SAD FUNERAL ADDRESS.—Here is a funeral speech which a Paris paper assures us was actually pronounced at Montmartre the other day by a father at the grave of his son: "Gentlemen," said the father, in a voice full of emotion, "the body before me was that of my son. He was a young man in the prime of life, with a sound constitution which ought to have insured him a hundred years. But misconduct, drunkenness, and debauchery of the most disgraceful kind, brought him, in the flower of age, to the ditch which you see before you. Let this be an example to you and to your children. Let us go hence."

THE MILLER'S DAUGHTER.

BY ALFRED TENNYSON.

It is the miller's daughter,
And she is grown so dear, so dear,
That I would be the jewel
That trembles at her ear:
For, hid in ringlets day and night,
I'd touch her neck so warm and white.

And I would be the girdle
About her dainty, dainty waist,
And her heart would beat against me
In sorrow and in rest:
And I should know if it beat right,
I'd slept it round so close and tight.

And I would be the necklace,
And all day long to fall and rise
Upon her balmy bosom,
With her laughter or her sighs,
And I would lie so light, so tight,
I scarce should be unclasped at night.

OBITUARY.

Hon. Robert John Walker, an American statesman, was born in Northumberland, Pennsylvania, July 19, 1801, and died at his residence, in Washington, November 11, 1869, at one o'clock and forty minutes. He graduated at the University of Pennsylvania in 1819, taking the first honors of his class. He at once commenced the study and practice of the law in Pittsburgh. In 1821, when but twenty years of age, he was made secretary of the Young Men's Democratic Association of Pittsburgh, and in 1823, chairman of the same. In the fall of 1823 he first proposed General Jackson as the Democratic candidate for the Presidency, drew up and offered the resolutions of the association, and wrote the address. In March, 1824, he was delegate to the Democratic State Convention of Pennsylvania, which nominated General Jackson, and drew up its address.

In 1825 he removed to Natchez, Miss. In 1828 he drew up the Democratic address of the State Convention in favor of General Jackson's election. In 1832, as one of the Democratic State Convention of Mississippi, he drew up an address in favor of General Jackson's re-election. On the first Monday of January, 1833, he made his somewhat celebrated address at Natchez, Miss., against the secession of South Carolina, in favor of General Jackson's proclamation, and advocating the suppression of rebellion in that State by force, if necessary. This speech received the strong written approbation of ex-Presidents, Madison and Jackson. Mr. Walker was at once nominated by the Union Jackson Democratic party for the United States Senate, and after a hot contest for nearly three years, was elected on the 8th of January, 1836, defeating the Hon. George Poindexter, the Legislature passing resolutions denouncing nullification and secession as treason.

On the 31st of March, 1836, being then the youngest member of the Senate, he introduced the "homestead bill" substantially as it has since passed in 1861, after a lapse of a quarter of a century. It was defeated by the opposition of both Clay and Calhoun. Subsequently, in 1841, he originated, introduced, and passed the celebrated "pre-emption" act of 1841, unrepealed to this day.

In 1837 he introduced and passed the resolutions recognizing the independence of Texas. In 1844 he first proposed in his celebrated Texas letter of the 8th of January the annexation of Texas.

Mr. Walker took a leading part in the Senate. The administration of President Van Buren also received his hearty co-operation at the beginning, but before its close he kept somewhat aloof from it. After the death of Harrison and the installation of Tyler, Mr. Walker became one of the trustiest advisers of the new President. He had, long before the measure was formally introduced, advocated the annexation of Texas to the United States; and when the treaty, which had been signed between the Texas commissioners and Mr. Calhoun, was brought before the Senate, he used all his influence to have it ratified, although he did not disguise his decided opposition to the project of legalizing slavery in all parts of the coveted territory. The treaty was rejected by the Senate on the 8th of June, 1844, but was brought up again early in 1845, and on the 25th of February passed both houses, the deceased taking an active part in its passage. He also aided materially in the acquisition of California, two years later; but at that time he was not in the Senate.

Mr. Van Buren's opposition to the annexation of Texas brought him in conflict with Mr. Walker, whose hostility was manifested in his efforts to bring about the nomination of Polk for the Presidency, against Mr. Van Buren. To the success which attended the effort he contributed largely, and in recognition of his services President Polk, in March, 1845, upon the recommendation of *every* Democratic member (with but a single exception) of *both* houses of Congress Mr. Walker was appointed Secretary of the Treasury, and was *unanimously* confirmed by the Senate.

His administration of the national finances met with signal success. The first report he made to Congress took a decided stand in favor of free trade and against the protective tariff policy of the whigs. Accompanying the report was a plan for a "revenue system," which boldly reduced custom duties on nearly all articles imported more than fifty per cent. The report and plan were fiercely assailed by the whigs. Senator Evans, of Maine, their recognized leader in the Senate, in a lengthy speech opposing the bill in which Mr. Walker's ideas were embodied, declared that if it passed the revenue for the ensuing year would not reach $12,000,000, and predicted the utter ruin of the manufacturing interests of the country. Daniel Webster, we find it stated, "daft a memorandum with the Clerk of the Senate that it would not produce $14,000,000." Prominent financiers of the old school, among them Abbott Lawrence and nine tenths of the New England bankers, pronounced the policy as destructive of the material prosperity of the country. Everywhere the friends of protection indulged in the most dismal forebodings.

In spite of the strenuous opposition he met with, Mr. Walker adhered to his financial ideas and succeeded in pushing the bill through both houses of Congress. It was approved by the President and went into operation immediately after. Mr. Walker had estimated that it would yield $80,000,000; the actual return was $29,000,000 the first year and an excess of $30,000,000 in succeeding years. Until the republicans obtained possession of the government, this system of imposing duties for revenue and not for protective purposes remained in force and met with marked success. When it was ascertained that his ideas on finances were sound, the reports of Mr. Walker attracted considerable attention abroad. Sir Robert Peel had them printed and laid before the House of Commons, numerous members of which spoke loudly in praise of the views they contained.

It showed he remembered, too, in this connection, that during Mr. Walker's administration of the Treasury Department, the war with Mexico was carried on. It has been claimed for him, and with some show of truth, that he had "the honor of being the only financial minister whom the world has produced, who has advanced government stocks and maintained them above par, during a foreign war and while it was borrowing money daily."

The revenue tariff of 1856 was unrepealed until it met its fate at the hands of the Republican party in 1861. The warehouse system, independent treasury, and Interior Department acts are still in force.

At the date of Mr. Walker's appointment to the Treasury, in time of profound peace, United States six per cents had been hawked over Europe, but a sale could not be effected at par. Before he went out, although the debt had been largely increased by the Mexican war, they commanded a premium of 23 in gold at home and abroad. This rise was owing to confidence in Mr. Walker, the increase in revenue, under the revenue tariff of 1846, the publication of Mr. Walker's reports by the Parliament of Great Britain, and the repeal of the odious corn laws of England, based, avowedly, upon these reports by Sir Robert Peel, who made the motion for their repeal.

In 1846 Mr. Walker opposed most vehemently the giving up 54 40, and advocated the acquisition of Russian America, *then* offered us. He urged the retention and acquisition of the whole Pacific coast. In 1848 he opposed the surrender of Mexico, and insisted upon its annexation, in order to prevent, as he *then* said, European intervention. Upon this question he tendered his resignation as Secretary to Mr. Polk, but at the latter's request, agreed to retain his portfolio, with the understanding that he might use his personal strength to defeat the treaty surrendering Mexico. The treaty was passed, and the retention of the whole of Mexico defeated by Calhoun, upon the ground that its admission into the Union would be a fatal blow to slavery.

In 1847 he advocated in his reports the construction of the Panama Railroad, and the establishing of a line of steamers from New York to Panama, thence to San Francisco, thence to China and Japan. In these reports he first promulgated the idea that New York would become the centre of the commerce of the world. This was much ridiculed at the time, both in Europe and America. At the close of Mr. Polk's term of office Mr. Walker resigned, with the satisfaction of knowing that the Governor had not l