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Table with 2 columns: Rates of Advertisement, and 2 rows of rates for different ad durations.

Legal notices at established rates. Marriage and death notices, gratis. All bills for yearly advertisements collected quarterly. Temporary advertisements must be paid for in advance. Job work, Cash on Delivery.

BUSINESS DIRECTORY.

TIONESTA LODGE No. 369, I. O. of O. F. MEETS every Friday evening, at 7 o'clock, in the Hall formerly occupied by the Good Templars.

TIONESTA COUNCIL, NO. 342, O. U. A. M. MEETS at Odd Fellows' Lodge Room, every Tuesday evening, at 7 o'clock.

J. B. AGNEW, ATTORNEY AT LAW, TIONESTA, PA.

ATTENTION SOLDIERS! I have been admitted to practice as an Attorney in the Pension Office at Washington, D. C.

W. E. LATHY, ATTORNEY AT LAW, TIONESTA, PA. Office next door to Lawrence House.

E. L. DAVIS, ATTORNEY AT LAW, TIONESTA, PA. Collections made in this and adjoining counties.

MILES W. TATE, ATTORNEY AT LAW, TIONESTA, PA. In West.

F. W. HAYS, ATTORNEY AT LAW, AND NOTARY PUBLIC, Reynolds Hurll & Co.'s Block, Seneca St., Oil City, Pa.

N. D. SMILEY, KINNEAR & SMILEY, Attorneys at Law, Frankfort, Pa.

FRANKFORT, PA. LAW OFFICE. In the second Court of Venango, Crawford, Forest, and adjoining counties.

LAWRENCE HOUSE, TIONESTA, PENN'A. C. E. MEYER, Proprietor. This house is centrally located.

CENTRAL HOUSE, BONNER & AGNEW BLOCK, L. AGNEW, Proprietor. This is a new house, and has just been fitted up for the accommodation of the public.

FOREST HOUSE, S. A. VARNER, Proprietor. Opposite Court House, Tionesta, Pa. Just opened. Everything new and clean and fresh.

W. C. COBURN, M. D., PHYSICIAN & SURGEON offers his services to the people of Forest Co. Having had an experience of Twelve Years in constant practice.

MAY, PARK & CO., BANKERS, Corner of Elm & Walnut Sts. Tionesta, Pa. Bank of Discount and Deposit.

WILLIAMS & CO., MEADVILLE, PENN'A., TAXIDERMISTS.

BIRDS and Animals skinned and mounted to order. Artificial Eyes kept in stock.

NEBRASKA GRIST MILL, THE GRIST MILL at Nebraska (Laurelton, Forest county) has been thoroughly overhauled and refitted in first-class order.

FLOUR, AND OATS, FREED, AND GATS, Constantly on hand, and sold at the very lowest figures.

EMPLOYMENT, Male and female, salary by commission. We pay agent a salary of \$10 a week and expenses.

MRS. C. M. HEATH, DRESSMAKER, Tionesta, Pa.

MRS. HEATH has recently moved to this place for the purpose of teaching sewing to the ladies of the town and county. She has a long time known, that of having a dressmaker of experience among them.

Frank Robbins, PHOTOGRAPHER, (SUCCESSOR TO DEXING.)

Pictures in every style of the art. Views of the oil regions for sale or taken to order. CENTRE STREET, near R. R. crossing, SYCAMORE STREET, near Union Street, OIL CITY, PA.

PHOTOGRAPH GALLERY, ELM STREET, SOUTH OF ROBINSON & BONNER'S STORE, Tionesta, Pa., M. CARPENTER, Proprietor.

Pictures taken in all the latest styles of the art.

NEW Furniture Rooms!



The undersigned here leave to inform the citizens of Tionesta, and the public in general, that he has opened a FIRST CLASS FURNITURE STORE, in his new building at the junction of Elm St. and the Dutch Hill road, where he keeps on hand a large assortment of

FURNITURE, Consisting in part of Walnut Parlor Sets, Chamber Sets, Cane Seat Chairs, Wood Seat Chairs, Rocking Chairs, Dining Tables, Extension Tables, Marble Top Tables, Kitchen Furniture, Bureaus, Bedsteads, Washstands, Lounges, Mattresses, Cupboards, Book Cases, Fancy Brackets, Looking Glasses, Picture Frames, and ALSO,

SASH & DOORS always on hand.

His rooms being large, and well situated he is prepared to offer superior inducements to purchasers. Call and examine his stock and prices, and be convinced.

UNDERTAKING, A full assortment of Coffins and Caskets constantly in stock.

THE LARGEST FURNITURE ESTABLISHMENT IN THE OIL REGIONS!

MILES SMITH, Dealer in CABINET AND UPHOLSTERED FURNITURE!

FRANKLIN, PENN'A. Consisting of Parlor, Office and Common Furniture, Mattresses, Pillows, Window Shades, Pictures, Looking Glasses, &c.

Also, agent for Venango county for the Celebrated Manhattan Spring Bed and Combination Mattresses, manufactured and for sale at my Furniture Warehouses, 13th street, near Liberty. Call and see sample Bed.

Dr. J. L. Acomb, PHYSICIAN AND SURGEON, who has had fifteen years' experience in a large and successful practice, will attend all Professional Calls.

Office in his Drug and Grocery Store, located in Tidoute, near Tidoute House.

IN HIS STORE WILL BE FOUND A full assortment of Medicines, Ligatures, Tobacco, Glass, Stationery, Glass, Paints, Oils, Collyers, all of the best quality, and will be sold at reasonable rates.

DR. CHAS. O. DAY, an experienced Physician and Drug Dealer from New York, has charge of the Store. All prescriptions put up accurately.

ADVERTISERS send 25 cents to Geo. A. P. Howell & Co., 41 Park Row, N. Y., for their Rightly-pegged Pamphlet, showing cost of advertising.

Boiler Explosion—Their Causes and Remedies.

TIONESTA, PA., April 3, 1877. ED. REPUBLICAN:—

After reading the account of the recent boiler explosion at Rogers & Landers' Mill, where two men were hurled instantly into the other world, others maimed and crippled for life, beside the terrible destruction of property, it certainly passes through the mind of the thinking portion of community, that there ought to be more stringent laws for the inspection and testing of steam boilers, and a radical reform in the management of them.

The oil and lumber interest have brought a great many engines and boilers into this country, and with them a fair amount of good engineers; but the majority of the men that have charge of boilers here, are men who are not at all fitted for what they are employed to do. We will start out and take the average saw-mill engineer—and by the way he's the fireman too: now to fire a saw-mill boiler does not require the care and training that it does to fire a steamboat boiler, or any boiler that fires with coal, because the fire is not so liable to get beyond your control as a coal fire. You can put a saw-dust fire under a coal fire you would have to work half an hour, and keep your pump going all the time. On most saw-mills of this region the fire has charge of the boiler and engine, and if anything goes wrong compelling them to shut down, he is called away to the saw, either to file or repair, leaving the boiler in charge of the fireman. Your average fireman has a certain pride about him to keep up all the steam that is needed (and to do so requires hard work on his part), so he fills his fire box with wood and has the steam blowing off at about 90 or 100 lbs., and waits the word to start up, which he generally does by letting on the full head of steam. Often the very act of starting up so will raise the safety valve so that it fairly howls for a while, until the circulation has started in the boiler and all the particles of steam and water are in motion.

Some mills are fitted with what is called a sawyer's valve—a valve that is opened and shut by the sawyer at the saw frame. These the engineer can only start up slow; but before the circulation has commenced, the sawyer opens up the valve, the steam strikes a blow on the piston head, rebounds to the boiler, sometimes without any visible injury,—but some day under these very conditions, they lose both their boiler and their life, and those left behind wonder how 'twas done,—never thinking or knowing that such treatment will sooner or later destroy any boiler in use—and gravely inform you that the water was all right, for they heard the fireman try it just before the explosion.

Another bad and dangerous practice is that of blowing water out of the boiler under pressure, and in some cases that have come under my notice, never letting the water out or cleaning the boilers during a whole summer. Some had no blow-off attached to them. The whole trouble in blowing water out of boilers under pressure is, the large amount of scum that is on top of the water, and as the water lowers in the boiler this scum sticks to the sides, and it, with the mud that settles on the bottom, dries there, by the heat of the boiler and wall, forming a new scale every time the boiler is blown out. This will in a short time render it unfit for use beside costing one-third more to run it. The only and safe way is to let the water out after the boiler and furnace have cooled off, and then wash it out; get all the mud off the walls and bottom of the boiler. Go into the office of the boiler inspector of any of our large cities, and any engineer can learn from the samples of burnt and blistered iron there exhibited, the absolute necessity of keeping his boiler perfectly clean; for it is only by that, and pure water, that you can prevent the thousands of small explosions that are constantly going on in muddy and scaly boilers, until at last one comes along with more force than another and another explosion is recorded, and no one left to tell the old story of plenty of water just before she went up.

That there are a great many explosions caused by overheating near the bottom of the boiler, causing the water to be thrown with such force as to break the shell, I think there can be no doubt. Mr. Rankin (see his manual of the steam engine and other prime movers) says of this class of explosions: "There is much difference of opinion as to some points of detail, in the manner in which this phenomenon is produced, but there can be no doubt that its primary causes are, first, the overheating of the plates of the boiler (being in most cases that portion called the crown sheet, which is directly over the fire), so that a store of heat is accumulated; and secondly, the sudden contact of such overheated plates with water, so that the heat stored up is suddenly expended in the production of a large quantity of steam at high pressure. Some engineers hold that no portion of the plate can thus become overheated; unless the level of the surface of the water sinks so low as to leave that portion of the plate above it, and uncovered. Others maintain with M. Bouffigney, that when a metallic surface is heated above a certain elevated temperature, water is prevented from actually touching it, either by a direct repulsion or a film or layer of very dense vapor; and that when this has once taken place, the plate being left dry, may go on rising in temperature for an indefinite time, until some agitation, or the introduction of cold water, shall produce contact between the water and the plate, and bring about an explosion." Mr. Brown, in the eighth edition of his Treatise on the Steam Engine, says: "There can be no doubt that the water is repelled from the metal in the same manner as it would be done if it were in the superheated state; and explosions have, no doubt, had their origin in this phenomenon. The water appears to be repelled from those parts where the heat is greatest." Mr. Calhoun, in speaking of the rising of the water because of the condensation of the steam above the water, says, regarding the force of the blow given by it: "In this case it would not be necessary to assume the existence of any defect in the boiler; for when the water once struck violently, the soundest iron would probably be broken, and the strongest workmanship destroyed."

The experiments of the committee of the Franklin Institute, demonstrated that the temperature of maximum vaporization of a clean iron surface, like that of a clean iron steam boiler, is 346° F.; that the temperature of perfect repulsion for the same is 385° F.; that the temperature of maximum iron vaporization for iron highly oxidated, but clean, is 381° F.; that of perfect repulsion of the same is 433°; the temperature of maximum vaporization of polished copper is 292°; while that of perfect repulsion is 315°; for the same oxidized, the temperature of maximum vaporization is 317°; while that of perfect repulsion is 338°.

It is known to all who have had any experience in the examination of exploded boilers, and also in the inspection of old boilers that have not exploded, that there are many boilers in use that are defective in construction, with poor safety valves on them; gauge cocks half choked up, and with large accumulations of sediment or scale in them, so that it is hard to understand why they have not exploded, while in many instances of explosion there are no such indications of weakness, or of defective fittings. Many exploded boilers never show evidence of being in bad conditions, and many are inspected that are not even suspected and found in prime order for an explosion. Mr. Fairbanks says: "explosions of boilers from a steady increase of pressure without overheating, occur whenever the pressure of steam

is increased beyond the strength of the boiler, and the rupture or break will commence at the weakest part of the boiler; the violence of the explosion will depend upon the pressure at the time, and, upon the point as regards the water level at which the boiler yields." Such explosions (and I take it from what I hear that the explosion at Rogers & Landers' mill was of this class), when they occur in cases of properly constructed boilers, can only be produced by pressure very much above the ordinary working pressure and, may be produced by an accidental or willful overloading of the safety valve; by the admission of the valve to its seat; or by the closing of a stop valve between the safety valve and the boiler. Many accidents have occurred from defective safety valves. Hearsay bearing upon this part of the subject of the strength of boilers to withstand a steady pressure: "It will not be out of place to mention the case of an old boiler which I tested some years ago: this was forty-two inches in diameter, about twenty eight feet long, with two twelve-inch flues through it. The heads were of cast iron. The iron in the shell appeared to have been 5/16 of an inch in thickness, and that in the flues 3/16 of an inch thick. It had been in use for over twenty years, and it was known that the water had been so low in it at one time as to lead to supposition that it might have been severely injured by the over heating. It had a heavy indentation on its lower side, caused by a settling of the front, thereby bringing too much weight on a little pier on the brige wall; yet it stood a pressure of two hundred and forty pounds per square inch without a sign of yielding. Notwithstanding this great strength of boilers, it is undoubtedly true that there have been explosions of boilers at their ordinary working pressures, without overheating and without sudden increase of pressure, because of defects of material, design or workmanship; as, for example, a plate that has to be flanged, may be so poor, or worked with so little skill as to have so little strength left in the bends, that a little alteration of form, from variation of pressure, on account of the defective staying of the flat part of the plate, may lead to an explosion. A boiler may be so poorly stayed that a very little corrosion around an imperfect weld in one of the stays may lead to an explosion; or a plate may have its strength so reduced at or near a longitudinal seam in punching, bending, planing, and riveting, that the little alteration of form that takes place at this place at every variation of pressure, may, by corrosion, so reduce the plate in strength at that point, that an explosion may ensue."

I know a part of a mill that needs so much care as the boiler, and yet gets so little, and therefore it is no wonder that about every paper you read the first thing that meets your eye, is, "A Boiler Gone Up." I think we have as good men handling boilers in this region as anywhere in the United States, but the trouble is, as long as a boiler will run, why let her run, and it is never replaced or laid aside until it has burst itself and some one with it.

An eloping couple in this instance were overtaken by the girl's father at Casey station, Tennessee. He pulled her out of the lover's wagon, put her in front of himself on a mule's back, and started for home. The lover gave chase, but the wagon broke down. Dill his presence of mind forsake him in that emergency? No. He shouted, "Sally, if you love me, slide off the mule!" She wriggled out of her parent's grip, and slid off the mule's back. Before the parent could get her remounted the lover came up about and, in hand to hand encounter, triumphed over the old man. The young ones mounted the mule and fled. The old man collected the broken wagon as his portion and drove sadly home.

"Ma, why don't you speak?" said little Jake. "Why don't you say suthin' funny?" "What can I say funny? Don't you see, I am busy frying doughnuts?" "Well, you might say, Jake, won't you have a doughnut? That 'ud be funny for you."

Little Johnnie is quite sure the picture of a Spitz dog he drew on the parlor wall was a good likeness, because it made his father mad.

They were very pretty, and there was apparently five or six years difference in their ages. As the train pulled up at Bussey, out on the A., K., & D., the younger girl blushed, flattened her nose nervously against the window, and drew back in joyous smiles as a young man came dashing into the car, shook hands tenderly and cordially, insisted on carrying her valise, magazine, little paper bundle, and would probably have carried her had she permitted him. The passengers smiled as she left the car, and the murmur went rippling through the coach: "They're engaged." The other girl sat looking nervously out of the window, and once or twice gathering her parcels together as though she would leave the car, yet seemed to be expecting some one. At last he came. He hailed into the car like a house on fire, looked along the seats until his manly gaze fell on her upturned, expectant face, roared: "Come on! I've been waiting on the platform for fifteen minutes!" grabbed her basket and strode out of the car, while she followed with a little valise, a hand-box, a paper-bag full of lunch, a bird-cage, a glass jar of jelly preserves, and an extra shawl. And a crusty-looking old bachelor in the further end of the car croaked out, in unison with the indignant looks of the passengers: "They're married!"—Burlington Hawk-Eye

Now is the time for the farmer to prepare his plans for the season's operations. Everything should be in readiness to go right to work. There should be no drawbacks in the way. Every tool, implement and machine should be in the best condition for use. Even the horses should be in their best order for the season's work, an important item. The cattle should be kept in good flesh prior to entering pasture fields, and these should not be thrown open to the cattle before the ground has become firm and the grass well grown. The rolling of wheat fields has a tendency to force back the roots of the plant, which the frost has thrown up and exposed, into their proper position again, when they recommence growing again with out knowing that they were so ruthlessly treated.—Germanous Telegraph

Sam Houston and the Ham. On a recent business trip to Houston I had for traveling companion a well known merchant of this city, who told story after story of early days in Texas. One struck me as worth preserving. "When my father first came here," said the merchant, "he settled in Houston—then the capital of Texas. I was put in a grocery and provision store under a very strict and parsimonious boss. One morning, just as I had swept out, Tom, Gen. Houston's body servant, came into the store. Looking round he spied a ham—a rare one in those days. Having asked the price, he said he would take it and the President would call around and pay for it. I felt proud of my sale, and called the attention of the boss to it as soon as he came in. "Did you get the money?" he asked quickly. "No; but President Houston is coming round to pay for it." "President Houston—the devil! Did Tom say he would see it paid?" "No, sir."

"Then you are a fool. Now, sir, you go straight to the President's kitchen and bring me that ham, unless Tom will say it shall be paid for." "I started off, very much crestfallen, and not liking the job before me. But I resolutely walked into the President's kitchen. Tom was there. I saw my ham lying there, with a few slices cut off it, and seizing it, told Tom, unless he would undertake to see that the money was paid, I must take it back. "Tom cogitated awhile, and then said: 'Young man, take back your meat. The General is a mighty good master, but a mighty poor paymaster, and I don't keer to involvulate myself with his debts?' "This was enough for me. I left with the ham in my hand. Going around to the gate, I had to pass the front door. There stood Gen. Houston, the President of Texas, with a pocket handkerchief in one hand and a toothpick in the other. 'My little man,' says he, in his superb manner, 'tell your master I am under great obligations for a most delicious breakfast, and would pay him, but I really haven't got the money. The fact is, young man, Texas is very poor, and, as her President, I must share her poverty.'—N. Y. Sun.

They Knew She Was Married. They were very pretty, and there was apparently five or six years difference in their ages. As the train pulled up at Bussey, out on the A., K., & D., the younger girl blushed, flattened her nose nervously against the window, and drew back in joyous smiles as a young man came dashing into the car, shook hands tenderly and cordially, insisted on carrying her valise, magazine, little paper bundle, and would probably have carried her had she permitted him. The passengers smiled as she left the car, and the murmur went rippling through the coach: "They're engaged." The other girl sat looking nervously out of the window, and once or twice gathering her parcels together as though she would leave the car, yet seemed to be expecting some one. At last he came. He hailed into the car like a house on fire, looked along the seats until his manly gaze fell on her upturned, expectant face, roared: "Come on! I've been waiting on the platform for fifteen minutes!" grabbed her basket and strode out of the car, while she followed with a little valise, a hand-box, a paper-bag full of lunch, a bird-cage, a glass jar of jelly preserves, and an extra shawl. And a crusty-looking old bachelor in the further end of the car croaked out, in unison with the indignant looks of the passengers: "They're married!"—Burlington Hawk-Eye