

UTILIZING WASTE COAL.

Worthless Slack Burned With Ease In Patent Furnace.

An illustration of the feasibility of using waste coal for power purposes has just been given here, one of the new patent water tube boilers having been installed in an oil mill in this city, reports Consul Hamm of Hull, England. The success of a public exhibition given shows, it is claimed, that much coal which has heretofore been rejected as worthless can be used and that greater efficiency can be obtained from this waste coal by the new method than from the best coal by the old method.

The system employs the known principle that almost perfect combustion can be obtained by mixing air in proper quantities with pulverized coal before the latter is introduced into a furnace. This insures better combustion with less air than usual and with a consequent increase of boiler efficiency by reducing the amount of heat carried away by the escaping gases. The results obtained with the poorest kind of fuel are claimed to be as follows:

The almost total elimination of losses, as all the fuel is burned in suspension, the amount of unconsumed coal in the furnace at any given time being infinitesimal.

The rapidity with which steam is raised under ordinary conditions. The system differs from others in that with ordinary furnaces some time is taken before the fires are completely alight, but in this case as soon as the boiler is fired theoretically full effect is obtained.

The smallest and cheapest kinds of "slack" are burned with ease, and high efficiencies are obtained.

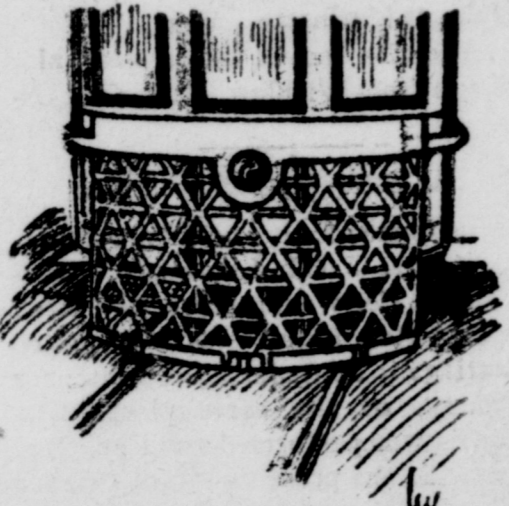
The arrangements which permit a close inspection of the straight vertical tubes.

The reduction of supervision necessary.

Coal dust costing \$1.25 a ton, which could not be utilized in any other way, was burned under this boiler and gave equal efficiency as compared with coal costing \$2.50 a ton and used with the old style of boiler. The boiler can be started and stopped by holding the fire up in one minute. In twenty-six minutes a steam pressure of 100 pounds can be obtained, whereas it takes about four hours to fire a boiler of the old style. At meal times the fire can be cut off and a great saving of coal effected. An additional advantage is that the space occupied by the boiler is considerably less than that required for the ordinary boiler.

Automatic Car Fender.

A slide shifting spring net and automatic trip fender for street cars has been tested out on the Portland (Ore.) street railways. The fender swings



SPRING NET STREET CAR FENDER.

any person or object it comes in contact with to one side of the track. It is claimed that this fender was the only one of the number tested out to be favored by the fender committee of the Portland city council.

Electric Fireless Cooker.

A decided disadvantage of the fireless cooker is that it is not entirely fireless, for the heat of a stove or gas jet is necessary in order to bring the food to be cooked to the proper temperature where the cooking process continues after being placed in the interior of the cooker. A new form of the fireless cooker makes use of the electric current for the purpose of imparting this initial heat, and the combination is said to represent a great convenience and economy. The articles to be cooked are placed just to the inside of their proper receptacles and the current turned on. Because of the complete insulation of the utensils the cooking process starts almost immediately, the amount of current being small. As soon as the cooking has started it is only necessary to turn off the current, and the work of cooking goes along indefinitely until the articles are removed. This apparatus is compact and dispenses with the use of a chimney.

Cranes and Herons in Surgery.

Many substances have been employed in turn for making sutures in surgery. Such substances must possess peculiar properties which are not readily found. Of recent years there has been recommendation used a new material of this kind, the tendons of the legs of cranes and herons. The tests show that these tendons are particularly well suited for surgical use. They are said to form excellent sutures and are readily absorbed after the wound has healed. Scientific American

JOY OF CREATING.

Put Your Heart In Your Work No Matter What It May Be.

While every man who makes a living is not a genius, yet the real joy of creating can belong to each of us in just as real and true a way. If we put into farming or banking or our school work the sense of making something we get the great treasure out of it. When we fill any task with ourselves we make something.

A girl says, "I made the room tidy," which simply means she put something of herself into the disorderly room and so beautified it. After she had made it tidy it reflected something of herself; it looked some idea of order such as she had in her own mind. A boy says, "I made a good recitation in school yesterday," and he is right, for, although the lesson was already there, it had to wait for him to come along and make it a recitation.

So it is everywhere. Making anything means, no matter how simple the task, that we bring out something that did not exist before and that that something is to some degree like the maker of it. We get out what we put in. If any one wants to be miserable the surest way is just to do things without putting his whole heart and self into them. Think of the mere outside of the tasks and they are not worth doing. But once put yourself into them and all that is changed.—St. Nicholas.

A LEGAL LEGEND.

The Tale of a Telling Comparison in an Oriental Court.

When Abd-el-Hakk was poor, as he was one day traveling across a weary plain, he came to the house of the Widow Zaidah, who was also poor, but when he made known his hunger she set before him two hard boiled eggs, and the food there was in her house.

Later, when Abd-el-Hakk lived in Marakesh and was very rich, Meludi, the lawyer, disliking him, persuaded the Widow Zaidah to sue him for the eggs, but not for the eggs alone, for they would have become two chickens, which in time would have so multiplied that the whole fortune of Abd-el-Hakk would not now pay for them. When the case came to trial the rich man was not in court.

"Why is the defendant not here?" demanded the judge.

"My lord," said counsel for the defense, "he is gone to sow boiled beans."

"Boiled beans?"

"Boiled beans, my lord."

"Is he mad?"

"He is very wise, my lord. Surely if hard boiled eggs can be hatched boiled beans will grow."

The suit was promptly dismissed, with costs to the plaintiff.—Pearson's Weekly.

A Wonderful Escape.

Fieschl tried to assassinate King Louis Philippe of France in July, 1835. The king was riding along the lines of the national guard in the Boulevard du Temple. There came a crash and a rush of bullets. Louis Philippe's arm was grazed, his horse was shot in the neck, Marshal Mortier fell dead and about thirteen other people were killed and thirty wounded. Fieschl had taken the upper floors of a house several weeks before and there rigged up an oak frame four feet by three feet six inches, supported on four posts of oak and itself supporting twenty-five gun barrels fixed in grooves at various angles so as to command an area of twenty-five feet in length and ten feet in height. When he fired the train of powder that set off his battery the king would have been killed if four barrels had not burst and two missed fire.

RENT BACK THE RULE.

Sauce For the Goose Was Not Juice For the Gander.

In the early days of a certain club in New York, when it was rather slender sledding for the club than it is at the present time, in a meeting of the council the question came up as to the arrears of members' dues, and the treasurer reported that one man was particularly recalcitrant in this regard. It was, in the winter, and the club was then maintaining throughout the day and evening beautifully heated and lighted quarters. At this time the only person in the club who frequented it every day was this delinquent, who, in addition to doing a large portion of his writing there, was accustomed to make considerable inroads upon the stationery of the club for home consumption.

At the meeting of the council referred to there was protest against this state of affairs, and a determination was manifested to put an end to it, and after discussion the secretary was instructed to notify the member in question that his name had been dropped from the rolls of the club. The question then arose whether there was anybody else who was in arrears, whereupon the treasurer reported that this was true of another member.

"Who can that be? Let us make an example of them both," remarked one member, bringing his fist down on

WOODSTOCK SCHOOL OF MUSIC

The most successful Music School in Canada

THE WOODSTOCK SCHOOL OF MUSIC was started by Mrs. Adney simply as a Name under which the scope of work of the most successful teacher of music in this Province might be extended. We shall not here refer to the course of study offered, except in a passing way, but to those more personal matters which so far out-weigh all other considerations as to make the list of truly successful schools of any kind very few in number. It is altogether a matter of the TEACHER.

The secret of Mrs. Adney's widely known success is that resolved upon having the best instruction at any cost she had the wisdom to select or the good fortune to be directed to the BEST TEACHERS IN AMERICA, and has the faculty of imparting what they taught her. William Mason was our greatest teacher of Piano and admitted as the equal of the best of Europe. He was a pupil of the immortal Liszt. Her lessons, over an extended period, were cheap at six dollars apiece. Previously, she had instruction from Gonzalo Nunez, a distinguished graduate of the Par's Conservatory, where Prof. Le Couppé was instructor on Piano. This world's greatest music school also perpetuates the musical theories of Liszt. These ideas lead to a technique in contrast with that of the dry, mechanical German technique. We criticize German execution, not German music. The influence, however, of this nation of musicians is such that their "method" is the one nearly everywhere met with. Combining Mason's "Touch & Technique" with the thus rarely taught "Conservatoire method," it is worthy of note that Mrs. Adney's steady use of "Le Couppé" has exhausted the American edition, and a new one is being printed for her use.

In Voice, Mrs. Adney was in a sense almost equally fortunate. After some instruction from a famous (that is to say, well advertised) teacher, whose method was not as great as his celebrity, nor his charges, she took lessons under Mr. A. A. Patton, a distinguished French singer and teacher, who with the finest credentials that France had to offer, came to New York to make his debut where German influence controlled everything from orchestra members to press critics, and it being shortly after the Franco-Prussian war his reception was so hostile that he abandoned his intended career in Grand Opera, and retired to the routine work of a teacher. Later she studied at the N. Y. Vocal Institute, under the talented Mr. Tubbs, editor of The Vocalist, and derived many ideas that have proven of great value here. So it happened that, by accident or otherwise, Mrs. Adney acquired the method in singing of the great Garcia, and the almost equally famous Shakespeare—the only true method of voice production and that which has produced the great singers of Italian and French Opera.

When deciding to carry on her well known private work in Piano, Singing, Musical Theory, etc., under the name at the head of this section, it was with the idea of extending its scope as opportunity might. It perhaps did not occur that Woodstock could not maintain a Victoria Conservatory of Music, which during the three years after its establishment became an institution of such recognized importance in the music world of Canada that at a special publication entitled "Musical Toronto" gave her and her work extended space. Perhaps it was because one of her pupils, solely instructed by her, went to the Toronto College of Music and in the same year took the Co'd in Piano. Two other pupils sisters, one fifteen and one thirteen years of age, after studying with Mrs. Adney entered one of the foremost Conservatories in Europe and began immediately to play in public recitals. The head mistress writing to their parents said "they have had the perfection of piano forte training and are artists already." Today her work has become so well recognized in the United States, that she has been invited to become a member of the National Musical Society, formed thirteen years ago by the very leading musical professors and patrons of the world, only seeking membership of those identified with "advanced musical research and its results."

There is a point relating to "Diplomas," "Graduation," etc., upon which Mrs. Adney needs again remind the public. Except for theoretical studies such as harmony, this School gives no "Diplomas," has no "graduates." In all practical, artistic work, the only test of proficiency recognized among artists is that of the actual work itself except for the degree of Doctor of music, for which only the masters ever qualify, and which is recognition of exceptional proficiency and musical learning. For all others the only recognized test is ability to perform, from memory, to say, two recitals, a program of pieces of certain grades of difficulty, one of ordinary music, and one from the representative works of the great Masters. The program itself is the "certificate" and no teacher of high standing offers anything else; and whatever institutions hold forth as an inducement the prospect of a "Diploma" for a certain amount of time in study, it may be taken as certain that the actual teacher is indifferent—any person whom the institution it convenient from time to time to employ. Even a school or institution becomes famous only through some national TEACHER in it. An artist of real distinction offers only his program: no one asks or cares WHAT he has studied at, but who was his TEACHER. The aim of this school is not to grind out graduates with diplomas; offer the best musical instruction, in our lines, that can be obtained in the Maritime Provinces, if not in Canada, and better than will be obtained by going to any but the few greater masters in the large cities of the United States.

Thus Woodstock offers advantages for musical study that one may go to any city in Canada, or to New York or London, and perchance not get. Mrs. Adney did not in the first instance select Woodstock as furnishing the full scope for her exceptional talents as a teacher, but she has made it and the work done here by pupils who are now successful teachers in various parts of United States and Canada, a credit to Town and Province.

Harmony, History and Theory of Music taught in classes which are free to pupils of the school. Ensemble classes taught by Mrs. Adney are also free.

Prospectus on application.

the table for emphasis. The reply was that it was Mr. X., the poet. "Oh, heavens!" replied another. "We can't let X. go. He's too important to the club."

Whereupon the resolution was then amended to read as follows: "Resolved, that the secretary be instructed to drop the name of Mr. Q. from the rolls of the club for nonpayment of dues and to retain the name of Mr. X. for the same reason."—Century.

THE COUNTRY BANKER.

His Standing In and His Grip Upon His Own Community.

The first public convenience a new commodity wants is a bank. Ofttimes it comes before the church or a newspaper; but, as a rule, it follows both. It is hard to beat the editor and the preacher.

If the influence exercised by the bankers of our great cities constitutes a menace to the public welfare, what shall we say of the grip that the little bank holds on its community? The so-called "country banker" to succeed must be eminent for all the qualities that make up a truly good man. Usually he is a church member and often a Sunday school teacher. He is consulted by politicians regarding the local government, and the candidate who has his approbation is envied, for he is usually the winner. To the country banker are credited the troubles, domestic as well as financial, of all who have access to him. And everybody seeks to have access.

The banker is first to subscribe to every good cause. He is the community's adviser as to investments and the arbitrator of its business controversies. His word is as good as his bond, and to his credit it must be added that, with rare exceptions, it deserves to be. He has few favors, and these are always granted. He is the center of the social life of his vicinity. His voice is that of authority. He is loved, respected, admired and feared. The banker is a man of integrity. The slightest cloud on his or on his bank will settle them both. In this matter he stands with the preacher. So, from selfish considerations, if you no other, the banker must be deserving of the respect reposed in him

by his fellow citizens. Who wouldn't be the country banker?—Leslie's.

Ancient Tipping.

Tipping is an exacting of so recent growth. Describing life at the court of King Henry II. of England, Peter of Blois complains of the impertinence of the medieval marshals, whose annoyances continue "until they get something from you and are most ungrateful when they have had, open enemies unless your hand is continuously in your pocket," while the "outer porters will tell you the most unblinking falsehoods, and if you are an honest and religious man, but have given them nothing the day before, they will keep you an unreasonable time standing in the rain and mire."

Willing to Help Him.

"What do you want to let me hold your hand?"

"It would make me glad and give me courage perhaps to say something that I—er—"

"There! Please hold both of my hands."—Chicago Record Herald.

Her Mark Down Mania.

Mrs. Benham—You are always making mountains out of molehills. Benham—And you are always marking mountains down to molehills.—New York Press.

Not a Permanent Return.

"I see your married daughter is home again."

"Yes, but only for a visit, my dear—only for a visit."—Detroit Free Press.

Punsters.

Douglas Jerrold, when challenged to make a pun on the zodiac, replied, "By Gemini, I can-er."

Rheodome Hook, when he was improvising at a party, and a Mr. Winter, a well known inspector of taxes, was announced, went on without a moment's break in his performance:

Here comes Mr. Winter, inspector of taxes. I advise ye to give him whatever he axes. I advise ye to give him without any flummery. For though his name's Winter, his actions are summary.

New Mexico's Coal Reserve.

The first record of coal production in New Mexico is contained in the issue of the first volume by the United States geological survey of mineral resources of the United States, which covered the calendar year 1882. In that year the reported output was only 157,092 tons. From 1882 to 1910 the total production has amounted to 31,102,813 short tons, which, including mining and other loss, represents a total exhaustion of about 48,600,000 tons. According to the estimate of Mr. Maurus R. Campbell of the United States geological survey, the original coal supply of New Mexico was 108,780,000,000 tons, so that the exhaustion to date represents approximately 0.03 of 1 per cent of the original supply. Mr. Campbell's figures do not, however, include the content of several newly discovered and extensive fields.

Cactus Telephone Poles.

According to a recent press report, the government is about to build a telephone from Tucson, Ariz., into the Catalinas for the forestry service. The building of the line will be rather difficult, owing to the rocky nature of the country, which will make it impossible in some places to set wooden poles of the ordinary type. It has been proposed that in the canyons the cacti growing along the line be used. Brackets will be fastened to the cacti, and the wires will be supported on the brackets in the usual way. This type of pole may be adopted wherever cactus grows along the line, provided it does not require too much zigzagging.

Utilizing the Waste at Quarries.

A noticeable feature at many of the Massachusetts granite quarries is the recent addition of stone crushers for turning the small waste into material for concrete, and even the "dust" from the crushers is in demand. Most of the waste is now utilized in paving blocks and crushed stone.

False Teeth Made of Paper.

False teeth made of paper in Germany are said to retain their color as well as porcelain ones and to be stronger and cheaper.