DESERET EVENING NEWS SATURDAY DECEMBER 21 1907

PROF. EBAUGH ON

SMELTER SMOKE

University Authority on Chemis-

try Tells of Struggle

To Control it.

FRICTION WITH THE FARMERS

It Is, He Says, Only One Symptom of

A Long Controversy Between

Unnighborly Vocations,

A growing University fashion is for

members of the faculty to apply the



Present Administration is Endorsed in Selections for Coming Year.

JAMES H. LAMONT PRESIDENT

He Has Presided Since Union's Organization and is One of Oldest Men in Service.

At the Electrical Workers hall on First South street, the carmon of Salt Lake dropped in and out all day yesterday, while the ballot boxes rematured open for the selection of their 1968 officials.

At 7 e'clock last night the polls closed and the day shift learned at once who were the successful candidates, while the night shift learned a little later, Jas. H. Lamont's re-election to the office of president is an endorsement of the policy pursued during his ment of the policy pursued during his recent administration, which included the big strike of last spring, and of an earlier administration, in which a threatened serike was averted just be-fore the expiration of a truce. Mr. La-mont is one of the oldest men operat-ing a streetcar, in point of length of service, and he has been prominent in local 352 since its first organization.

BURT RE-ELECTED.

A. H. Burt, who succeeds himself in A. H. Burt, who succeeds himself in the other important office-that of sec-retary and business agent, was dele-gated from this chapter to the recent convention of the Amalgamated Soci-ety of Street and Electric Railway Employes of America, At that con-vention he reported on the differences between the convention of the differences between the company and the men re-



JAMES H. LAMONT.

One of the Oldest Men in the Streetcar Service, and President of Local 382, a Position to Which He Was Re-elected Yesterday.

the attention of the government engin-eers. Three dams are how being con-structed to back water up for a large reservoir, which at present has a shore line of 33 miles. Mr. Horn is enthusiastic over the work now being accomplished, and thinks the project will be completed next summer, enjoyed and the entire affair was de-cidedly successful.

Miss Louise Sullivan will entertain the new card club at her home to-night. . . .

Mr. and Mrs. Fred Scarff of Chicago are here for the holidays and are at the Kenvon. $M = \{M_i \mid i \in I\}$

freshments were served, after which the club adjourned. There will not be another meeting of this club unth Another meetin 9. Thursday, Jan. 9.

holidays in Park City.

Mrs. W. C. A. Smith, Jr., of Idaho Falls, is visiting with relatives in this citz.

The Upsilon sorority have issued in-vitations for a dancing party to take place on Dec. 27.

Mr. and Mrs. John Zane and Mrs. Zane's sister, Mrs. Stewart, are here from Chicago and are at the Kenyon,

On Tuesday Miss Ivy Smithrust and Wilford Dyer were married, the cere-mony performed by Bishop E. F. Parry at 7 o'clock at the home of the bride's parents. The bridal party stood under a large wedding bell of roses and chrysanthemumus and the room was prettily decorated in the same flowers. Miss Dell Wingles was bridesmaid, and both bride and bridesmaid were gown-ed in white and carried roses. Mr. and Mrs. Dyer left later for Los Angeles and will be at home after Jan. 15, at 832 west Third North street. On Tuesday Miss Ivy Smithrust and

DIVORCE MATINEE.

Judge Morse entered a decree in di-vorce yesterday in favor of Ella A. W. Billingsley, untieing the knot that bound her as a wife to Daniel F. Bil-

learning of their respective departments to the practical problems around about the campus. Prof. W. C. Ebaugh, head of the department of chemistry of the Univerity of Utah, has contributed a paper of decided interest in the prevailing valley problem of smelter smoke, Prof. Ebaugh takes up the question as a chemical problem, reviews the battle to decide whether the smoke could be controlled, and finally gives the results in the court decisions to close down the Murray and Bingham Junction plants.

plants. "A few weeks ago," begins the ar-ticle, which is written for the Educa-tional Review, "The public press an-nounced that the appellate court, sit-ting in St. Paul, had affirmed the de-cision of the United States district court with respect to the suit for a permanent injunction brought by an association of farmers against the smelters operating in the Salt Lake valley. plants valley

STRUGGLES OF INDUSTRIES,

STRUGGLES OF INDUSTRIES, In many ways different industries are to a certain extent incompatible. Thus paper milis and bleacherles could not very well turn out good white products were they to be located in an iron working district, where clouds of black smoke constantly darken the skies. Water issuing from mines is sometimes injurious to vegetable and animal life; and the refuse or "tail-ings" from ore concentrating plants pollutes streams, fills irrigating d.tches and covers valuable agricultural land pollutes streams, fills irrigating ditches and covers valuable agricultural land with undesirable deposits. The ways in which slaughter houses, gas works, chemical factories and other industrial cstablishments emit offensive odors, discharge impurities upon surrounding land and into neighboring streams will occur to one who gives the matter a moment's thought.

STATUS OF CLAIMS.

STATUS OF CLAIMS. There can be no question as to the fact that in some quarters exaggerated ideas prevail as to the amount of dam-age done by the similars. At the same time it is true that portions of the valley suffer severely from the smoke. The harmful emanations are either gaseous or solid. The former include sulphur dioxide, with possibly small quantities of trioxide, and the latter include arsenic. lead, copper, and other metallic compounds, largely in the form of oxides, sulphildes and sulphates. Formerly it was held that the gases mentioned were alone responsible for damage to vegetation, and the solids were injurious to ani-mais; but a more recent view shifts a larger portion of the biame for in-jury to vegetation to the solid eman-ations. Other things being equal the amount of damage done its greater in a moist than in a dry climate. PURIFYING SMOKE,

A question naturally arises as to why the smelters do not "purify" their smoke, many persons thinking that it would be a problem as easy of solution as is that of consuming the smoke from a coal fired power plant. As a mater of fact the two conditions are mater of fact the two conditions are in 'no way similar. Black smoke comes from coal only because the coal is not burning completely, and every pound of carbon going off in the form of soot means an actual loss of that much fuel. It becomes economical to install devices to render combustion omplete, and many forms of appara-tus have been designed to bring this about, thus assuring an increased ef-ficiency for the plant as well as a ces-sation of the coal smoke nuisance. But in the case of smelter smoke this is not true. Sulphur dioxide is a suffo-

cating gas with a disagreeable odur, No form of smoke rensumer, other than a complete sulphuric acid far-tory, has been designed to remove it subfactorily. Why do not the smelt-ers convert it into this acid and make a valuable by-product from a noxious waste product? Hecause it would not be possible commercially. The four smelters in the Murray-Bingham Junction districts could make enough acid to supply all the United States, and still have some left over. As transportation charges on the acid would prevent its shipment to distant markets, some method for its disposal locally would have to be found. WATER PROCESS.

WATER PROCESS. Equally unsatisfactory is the sugges-tion that gaseous and solid impurities be removed from the smoke by scrub-bing it with water. There is not enough water in the streams of the emelter district to dissolve the sulphur dioxide from the stack gases, and even if there were enough, what disposition could be made of the solution? As-suredly it could not be charged back into the waterways or piped into the lake, for reasons that are self evident. The finely divided solid particles known as furme seem to pass directly through water as though they were greased or surounded by a firm of protecting gas, consequently do not collect in the wa-ter. insequently do not collect in the wa-

Solids can be removed from lead blast furnace gases by filtering them through cotton or woolen cloth, and this is now done in bag houses. To look at the stacks leading from a bag house would make one believe that that part of the plant was not in op-eration, but this is merely because the solids contained in the smoke have been effectaully filtered out, and nota-ing but colorless gaseous constituents of the smoke are escaping into the air. Sollds can be removed from lead

METHODS ABANDONED.

As yet it has not been found com-mercially practicable to filter gases coming from reasters or copper fur-naces. For removing solids from such grees use is made of the facts that a cooling of the gas, retardation of its vecority and exposure, to a large con-decising surface will mattrially assist in precipitating its solid contents. Wa-ter purification methods have been abandoned.

Under the ruling of the courts the smelters are now enjoined from treat-ing ores which contain, in their natural state, more than 1 per cent of sul-

phur, and from throwing out deleteri-cus substances. One company-the American-has entered into an agree-ment with the plaintiff in accordance with which it will continue to operate under certain restrictions. Copper smelting, however, could scarcely be earried on successfully under similar restrictions. Two of the copper smelt-ers have already acquired sites for plants in the Tooele valley, and it seems probable that they will creet harge reduction works there. It must be remembered that the Garfield smelter, on the shores of the lake, and the Yampa smelter in Bingham Can-yon, are not parties to the suit under discussion, and consequently are not affected by the injunction proceedings. What will be the effects of the de-tree? The future alone can answer this question. For the present we must rest content with the feeling that the courts have handed down fair decisions, that the cessation of industrial activiphur, and from throwing out deleteri-

that the censation of industrial activi-ty will be only temporary, and that the resourcefulness of capable mana-gers and their assistants will be suffi-cient to enable them to convert pres-ent disadvantages into future benefits. Smalling and agriculture are benefits. ent disadvantages into future benefita. Smelting and agriculture are honorable and necessary industries, and the val-ley of the Great Salt Lake is surely large enough to accommedate them both. No nermanent loss to the state need be anticipated. With character-istic American vigor, men of affairs will cause a new order of things to arise, and improvement and expansion will continue to mark the progress of both agriculture and metallurgy.



both agriculture and metallurgy.

Woman's Co-op. is closing out winter millinery. A fine assorting ciderly indicer bonnets at prices., 29 East First South



We have just received a large shipment of very fine stationery any box of which is easily worth from 40c to 60c. This fine assortment we will sell Friday and Saturday for 25c a box. A nice box of stationery makes

a very acceptable gift for Christ-

GODBE-PITTS DRUG CO. Phones No. 140.

PROBATE AND GUARDIANSHIP NOTICES.

Consult County Clerk or respective sign-ers for further information,

N THE THIRD JUDICIAL DISTRICT Court, in and for Sait Lake County, State of Utah. Department No. 1. In the mat-ter of the estate of Alice Davis, decessed. Notice. The petition of David Joseph Davis and N. Smith, praying for the ad-mission to prohate of a certain document, purporting to be the last Will and Test-ment of Alice Davis, decessed, and for the granting of letters of Administra-tion with Will appeared to N. Smith, has been set for hearing or N. Smith, he mean of Alice Davis, deceased, and for ment of Alice Davis, deceased, and for the granting of letters of Administra-tion with Will annexed to N, Smith been set for hearing on Saturiay, in atth day of January A D. 1988, at o clock A. M. at the County Court, in Sa in the Court Room of said Court in Sa Lake City, Sait Lake County, Utah Witness the Clerk of said Court with the seal thereof affixed, this lab d of December, A. D. 1967. J. U. ELDREDGE, JR.

By W. H. Farnsworth, Deputy Clerk, Richards, Moffat, Porter and Ashter ttorneys for Petitioner.





ALLAN H. BURT. Re-elected Secretary, Streetcar Men's Union. He Represented Local

Hon. Theodors Bell, president of the Order of Engles, while in Salt Lake, was a guest of the Cullen. Before leaving for the east last evening, Mr. Bell announced that he had secured The Undine club girls met at the home of Miss Enid Edmonds last Thursday night. A very interesting program was rendered, those taking part being Kate Gabbott, Virginia Smith, Lisle Bradford, Olive Shepard, Anna Frazier and Enid Edmonds. Re-trachements ware served after which

A grand ball will be given by the Congregatione Montflore on Wednes-day, Jan. 8, at Kennedy's hall on Mar-ket street for the benefit of the He-brew free school.

Miss Virginia Smith will spend the

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PURIFYING SMOKE,

382 at the Recent Convention in New Orleans, of the Amalgainated Society of Street and Electric Railway Employes.

donal executive committee to take charge of affairs. Mr. Pratt also re-ported on several other stirring events which he had been the center of, after leaving Sait Lake leaving Salt Lake.

SOME CONTESTS.

COAL CASES GO OVER.

Hearing Not Resumed Today Owing to Illness of Master Lewis,

Owing to the illusia of Master in Chancery S. H. Lewis, the taking of testimony in the case of the United States versus the Utah Coal company, was not resumed today, as had been expected. Special Counsel F. A. Maynard and Dist. Atiy. If. E. Broth returned from the east last evening, and were ready to again take up the case, as were also altorneys for the defense. New York et Weitligt and the star-



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sulting in the present working agree-ment, and he listened to a report on the same occurrences submitted by C, O. Pratt, who came here from the na-O. Pratt, who came here from the nathe service, as deputy lecturer and general organizer for the order, of Mr. John P. Meakin of this city. "I re-gard Mr. Meakin as a very able man, and am pleased to be able to secure his services for our order. Mr. Mea-kin will take up his work for us the first of the year, and will leave for Chicago, which will be his headquart-ers, soon after Jan. 1."

---S. S. DOMINION ARRIVES.

White Star Liner Reaches Liverpool On Tuesday, Dec. 17.

The White Star steamship Dominion arrived at Queenstown Monday, Dec. 16, and the following day anchored at Liverpool. On board were the following; John N. Clawson, Frank M. Whitney, Orson P. Scheitler, David H. Thomas, John Eggen. Jesse Pocock, A. P. Davis, John C. Rush-ten, Jacob Kung, all of Salt Lake City; William Mackay, of Ogden; Harold Smoot of Provo; Ebenezer Kirkham, George F. of Provoj Ebeneger Kirkham, George F. Schow, of Lehi; Herbert J. Hurnes, Kays-ville, Morgan Rich, Paris, idaho; Thomas J. Bennett, Shelley, Ida., Mark M. Matty, Vernai; Nephi Hodgson, Sugar House; Jorinh Blackburn, Rexburg, Ida.; Edward P. Oldham, Paradise, Lewis Guymon, Angus Johnson, Orangeville; Hans Mik-kleson, Hyrum, Lars Anderson, Lund, Ida.; Otto A. Johnson, South Houmiful; John W. Pitcher, Smithfield; Lesile R. Clegg, Blackfoot, and other Utah and Idaho passengers

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SOCIAL AND PERSONAL.

case, as were also attorneys for the detenas. New York and Washington were yis-fied by Mesara Maynard and Booth and by Atiys, E. M. Allison, Jr., and John M. Zana, for the purnose of tak-ing depositions of experts and wit-nesses who could not well be present at the hearings hero. The case will not come before the federal court dur-ing the November term, as a continu-ance has been made until the April term. officers were there as guests including the representatives of five stakes.

Miss Minnie Eadler has returned from an eastern trip.

bound her as a wife to Daniel F. Bil-lingsley. The evidence showed that Hillingsley descrited his wife at the time their child was born. They were mar-ried in Eureka on Oct. 30, 1901. John Berger will be awarded a de-cree of divorce next Friday unless his wife shows good and sufficient ground why it should not be done within that time. Mrs. Berger lives in Denver and according to Berger will not leave the place, although his work calls him in other parts. Several postponements have been secured by Mrs. Berger, and yesterday Judge Morse refused to put the case off longer.

BOTH LOSE SUITS.

A double verdict was returned by a jury in Judge Ritchle's court vesterday in the suit of B. T. Lloyd against Moses Thatcher, and in the counter suit in which the parties were reversed as plaintiff and defendant. Lloyd sued Thatcher for the payment of \$2,920 claimed to be due for mining stock purchased and not paid for. Thatcher set up that the \$30 claimed by Lloyd to have been paid on the mining stock to have been paid on the mining stock was a loan, and he sought its return. The jury found for the defendant in both cases.

SMELTER MUST PAY.

Lena I. Taylor and her children and an unborn child, were awarded judg-ment yesterday by Judge Ritchie for \$2,050 to be paid by the Garfield Smelling company. The action was brought to recover for the death of Riley Taylor, who was caught in a mass of molten matte some months ago. sgo.

NICELY COMMITTED.

Samuel Nicely was committed to the state menial hospital yesterday by Judge Armstrong. The old man was taken into custody yesterday by Dep-uty Sheriff's Sperry and Russell. He had come from Nevada several months ago, where he had been an inmate of an agylum. He was so violent that it was found necessary to confine him in the vault adjoining Judge Armstrong's court room. Even the his screams could be heard over the entire build. could be heard over the entire build-

SIX BEST SELLING BOOKS.

FOR MONTH OF NOVEMBER.

According to reports from the leading ing book sellers of the country, the six books which have sold best in the order of demand during the month are:

In addition to the above we have a large stock of other popular books of the day. DESERET NEWS BOOK STORE, 6 Main Street,

RETURNED MISSIONARIES.

HETURNED MISSIONARIES. Have you a friend of acquaintance in your former field of labor, to whom you would like to send a copy of the Semi-Weekly News? If so, take ad-vantage of our special offer, made to ald the geat missionary work. We send the paper one year to any point in the United States, Canada or Mexico at half price, \$1.00. This does not apply to points where there are regular wards or stakes. Foreign postage ex-tra.

BIG HOLIDAY SALE ON LADIES AND MEN'S SUITS

Sold on Credit for \$1.00 a Week or \$4.00 a Month by the

WESTERN OUTFIT

266 State Street

One-Third to One-Half Off on Every Garment in the House

AS XMAS RUSH IS ON, our entire stock goes at 1-3 off on anything you buy. Our line of LADIES' SUITS we can safely say is the largest in town today, including SKIRTS, WAISTS, FURS, MILLINERY (ready to wear Hats). Also we show a complete line in MEN'S HAND-MADE SUITS AND OVERCOATS. Nothing surpasses clothes for a Christmas present, and owing to the hard times many of us are not in a position to make gifts we would like to by paying cash down. Call on us and you can get anything you desire in our store with a small payment down. Then you take the clothes and pay us.

\$1.00 a Week or \$4.00 Per Month

It's your best opportunity to come early to buy to secure best selection. WE GUARANTEE EVERY ARTICLE WE SELL We require no security and don't ask your neighbors about you. No connection with any other store in town. Store open every night until Christmas.