#### 12

#### BUT THE BEGINNING. CYR SMASHING RECORDS.

### Morris Mead Points Out Electrical Possibilities as Shown

AT THE BUFFALO CONVENTION.

Ordinary Interest.

## TESTING TRANSMISSION OF POWER

Morris A. Mead, Superintendent of the Bureau of Electricity, has returned from Buffalo, where he attended the annual meeting of the National Electric Light Association, at which all the leading electricians of the nation were assembled. Superintendent Mead was delighted with his experiences at the convention and he talks glowingly of the work accomplished and the marked evidences of progress made since the last annual gathering. Talking of the late convention yesterday Superintendent Mead said:

"I think it is Emerson who has said that 'America is another name for opportunity.' Looking at electric matters from this standpoint, I can safely say that the more I attend electrical conventions the more I study electrical problems. The more I am brought into contact with the leading thinkers of the age in these lines, the more I am convinced of the immense fields still opening up, and of the fact that American opportunities, electrically considered, show up worlds yet to conquer worthy of an electrical Napoleon.

#### Many Men of Science There.

"Men of science from the leading marts of the country were at this meeting, of whom Prof. Elisha Gray, of telephone fame, and Prof. Elihu Thomson, of the Thomson-Houston Electric Company, are notable examples. They entered with zest notable examples. They entered with zest into the discussion of all questions. The long distance transmission of power was one of the main questions in ler considera-tion, and the practical examplification of this is expected to be worked out by the utilization of Niagara's water power. A large tunnel, about one and one-half miles long and 160 feet below the surface, is be-presentements and is evented by the fall ing constructed, and is expected by the fall of water and the necessary turbine and gearing arrangements, to generate 120,000 horse power. According to this circular this is a greater horse power than that of Lawrence, Lowell, Holvoke, Turners Falls, Manchester, Bellows Falls, Lewiston, Os-wego, Paterson, Augusta, Ga., Minneap-plis, Rochester and Lockport combined. This great power is to be utilized for electrie lighting or generating currents for electric purposes, and Buffalo, 26 miles away, is telicitating itself upon the great possibilities in store for it from this source.

#### **Possibilities of the Future**.

"If this be successful who can limit the possibilities of the future from this power? Why may not Pittsburg ultimately derive power from the same source? When we realize that coal and steam and boilers and engines are to be done away with and it becomes simply a question of condensing the cost of these things with a conductor for conveying power long distances, start-ing from a source as everlasting as the rocks and waters thenselves and using the economic forces of nature itself, it does not seem chimerical to imagine a time when the utilization of the forces of nature will be economy hundreds of miles from its starting point; I am speaking especially from the electrical standpoint, leaving the ele-ments of mechanics to those skilled in those

"Our meeting was made interesting by the "Our meeting was made interesting by the discussion of the following subjects: Trans-mission of Power,' The Alternating Cur-rent Motor,' The Alled Powers,' which means steam and electricity, 'Franchises of Quasi-Public Corporations,' 'Overhead Con-struction,' 'Operation of High Tension Cur-rent Underground,' 'Underground Construc-tion of Electric Railways,' and 'The Rela-

The Wonderful Canadian Strong Man Lift-ing 273 and 301 Pound Dumb-Bells as if It Were Child's Play-Sardow Easily Outdone Before a London Audience. NEW YORK, March 2.-[Special.]-Louis Cyr attempted to beat Eugene Sandow's record of lifting a 269-pound dumb-bell at The Features Which Are of Nore Than the Royal Aquarium, London, recently. Cyr secured the largest bell that could be obtained, and loaded it up until the beam

tipped 273% pounds. Archie Sinclair, the noted heel and-toe walker, was the clerk of the scales. Cyr grasped the bell and lifted it onto his thigh, and then, with a mighty

effort, he raised the immense piece of iron to his left shoulder. It was quickly shifted to the right shoulder, and then the big bell was gradually raised in the air, and the athlete's body followed the weight. Before

lete's body followed the weight. Before the body could be got perfectly straight the bell turned in Cyr's hand, and the big piece had to be dropped to the floor. He tried it again and again, but failed. A few days afterward Cyr again attempt-ed the feat and was successful. He put up the bell at the first trial. Grasping the 273¼ pounds of iron with the right hand alone, he raised it to his thigh and then got it to his choudder. Then certing a good it to his shoulder. Then, getting a good grip on the bell, he slowly raised it in the air until the arm was perfectly straight and the athlete's body was erect. It was a splendid and clean performance, and beat his American feat of putting up 265

pounds. Cyr was not content with this perform-ance, but he essayed another one, namely, that of elevating a bar-bell weighing 301 pounds, using two hands in the achieve-ment of this new record. The bell was raised from the floor to the chest with one motion and then slowly pressed to arm's-stretch above the head.

After Cyr had taken a little rest he tried After Cyr had taken a little rest he tried two more records. With one sweep from the ground he raised to arm's-stretch above his head a dumb-bell weighing 1741/4 pounds. The right hand only was used. Then the same feat was successfully tried with the left hand, making two more world's records. The bells were weighed on the stere in the left of every set of a stretch above. on the stage in full view of everyone, and a committee of 25 gentlemen watched the weights and scales.

#### CONGRESS OF MEDICAL MEN.

#### Anxious for Aid From the Administration

to Make It a Success. WASHINGTON, March 2.-[Special.]-Dr. Charles A. L. Reed, of Cincinnati, is in Washington to secure the interest of the administration in the Pan-American Medical Congress, of which he is the Secretary General. This is to be a con-gress of the physicians of all the various countries of the Western Hemis-phere, and is to meet in Washington in September, 1893. The prominence of the medical profession in state affairs in those countries give this movement an important countries give this movement an important political meaning in view of our reciprocity

The Congress will be divided into 21 sec-The Congress will be divided into 21 sec-tions, for the consideration of the differ-ent departments of medical science. One section, under the Chairman-ship of Dr. Walter Wyman, surgeon general of the marine hospital service, will be devoted to international sanitation and measurements of the Sanitation and the quarantine. The Spanish-American Min-isters resident at Washington express a warm interest in the enterprise.

#### AFTER PRINCE MICHAEL'S SCALP.

#### The Husband of One of His Converts Objects to His Methods.

DETROIT, March 2 .- [Special.]-An old farmer named Harris, living north of Detroit, to-day called at the Mayor's office with a complaint against the religious colony on Hamlin avenue, known as the Latter House of Israel. He claimed that his wife had been persuaded to leave him and join the community. They had been married for years. He was referred to the prosecuting attorney. Harris claims his wife is the fourth

leave her husband and join Prince Michael The latter lives in what he calls the "Hous of the Lord," with ten of the maiden mem bers of his sect, while his wife, who has been discarded by him, resides in the resi-dence of one of the disciples. The members believe in free love, and they are free to court each other in this peculiar way, even though hampered by husbands or wives.

MILD STEEL FUSION. A Phenomenon in the Melting Conditions of This Metal. THE INTERIOR MAY BE MOLTEN

THE PITTSBURG

While the Exterior Remains in a Perfectly

## Solid State. A DISCOVERY OF GREAT IMPORTANCE

The discrepancies in regard to the melting points of certain iron and aluminium alloys, as stated by different observers-a matter to which forcible reference was made by Mr. Hadfield in his paper on aluminium steel, which appeared in the second volume of last year's Transactions of the London Iron and Steel Institute-has induced E. J. R. Carulla to bring to notice a circumstance which, while he does

not profess to say it explains the variations referred to, may yet have some bearing upon them, and is otherwise of interest to iron and steel users and manuacturers.

The phenomenon in question is the remarkable one that the interior of a piece of mild steel may be raised to the fusing point while the outside remains in the solid state, just as if one were to try . to melt an iron just as if one were to try to melt an iron tube closed up at each end, and filled with some metal of a lower melting point than iron, in which case the heat would pene-trate through the iron and liquify the in-terior long before the tube itself would be af-fected, and if there should happen to be some outlet or weak place in the tube it might be left completely empty. Bessemer steel makers, especially those who may have employed the system of upward casting, will be reminded of the shells of ingots accidentally obtained in the melting shop by an in-cautious act, produced, however, by a dif-ferent process, viz: by the cooling of the outside while the interior of the ingot re-

#### mains in a molten state. Shells Obtained Many Years Ago.

Shells have also been obtained by alter-Shells have also been obtained by alter-ing the nature of the exterior of a piece of east iron, so as to leave the interior more fusible than the outside. Henry Horne, so long ago as the year 1773, in his "Essays Concerning Iron and Steel," after describ-ing Reaumur's method of softening cast iron by means of a mixture of calcined hones and powdered charcoal, goes on to

"I have myself tried the truth of the "I have myself tried the truth of the hypothesis in a rough way, as far as neal-ing, or merely reducing, has any concern in the matter, by a great number of experi-ments, two only of which I judge necessary to recite by way of specimen. I had several small ingots of cast-iron, about three quarters of an inch thick; these I put into a crucible covered all round with the matter above described, and in that situation com-mitted them to the fire, where I suffered them to remain a sufficient time, then took them out and gave them a strong heat, when them out and gave them a strong heat, when the exterior parts were become capable of bearing even a welding heat, while the in-terior suffered an easy dissolution, and ran terior suffered an easy dissolution, and rain out into the fire. I ran some other ingots in the form of pistol barrels, which having treated in the same manner, the same consequence ensued; the exterior cases, as before, remained firm and stable, while the interior dissolved and ran out,

and left cases in the entire form of pistol barrels."

The instance, however, to which this paper refers, is altogether different from those just mentioned, and it will be perhaps best to give an account as accurately as can now be remembered of the circumstances under which the observation was made. Some years ago the writer was engaged at Sheffield in the operation of melting, in pots or crucibles, steel intended for the manufacture of wire ropes, the material charged being mainly Bessemer scrap of varying carbon contents, which, however, by the process became averaged, and the resulting product attained a uniformity that was uch appreciated for the purpose nat

tageous that where a steel forging can be finished under the hammer, this should be done. Doubtless, finishing by means of moulds, so as to bring the article as near to the ultimate shape required as possible, is the bess course to pursue. The hydraulic press will no doubt play an important part in this direction at no distant date, though much has already been done by working in this manner under the steam hammer. The writer, for example, remembers the manu-facture of large screws for holding armor plates to the sides of vessels, being carrried ou many years ago at the Atlas Works, Sheffield. These screws, whose thread was forged under molds, had the original skin of the bar left all over them, the torgings being further protected by galvanizing. Pollshing Might Simplify Matters.

DISPATCH THURSDAY, MARCH 3, 1892.

Polishing Might Simplify Matters, It is not forgotten by the writer that engineers advocate machining not only so as to obtain the symmetry that is so engineers advocate machining not only so as to obtain the symmetry that is so desirable, especially in pieces to which mo-tion is imparted, but also so as to make visi-ble any hidden flaws that might be present in a forging. The importance of this ol-jection is not to be minimized, but apart from the fact that a forging with the tough skin on and some hidden flaw left might be preferable to one from which the skin has been removed, and the flaw "doctored up," it may be pointed out that in many cases simple polishing, say, for example, by means of the emery wheel, might effect the desired object without in any material degree weak-ening the strength of the surface protection. It can be imagined, at sight of these com-paratively infusible envelopes, that it would be quite practicable to weld mild steel and obtain a fibrous product by piling and pass-ing the heated mass through the rolls or working it under the hammer.

working it under the hammer. Nevertheless, according to Mr. Skelton, some difficulty appears to have been en-countered in the attempt to make rivet-bars in this manner from mild steel-plate cut-tings, possibly not because of any inherent fault in the method, but because it may not have been carried out properly, as for ex-ample, by the introduction of hard pieces in the pile

On the other hand, Mr. Ratliffe, of the Mersey Forge, it will be remembered, read a paper before this institute in 1879, wherein he explained how he actually preferred to roll down his ingots of mild steel into bars, which he afterward piled to make into forgings. Economy in the Process.

Economy in the Process. Not only did Mr. Rathiffe say that he ob-tained by that means a fibrous metal, free from all crystallization, but also that he accomplished this desirable result at considerably less cost than by making the forgings from large ingots. It is not likely that this economy would follow in every case, but much would be gained if the results obtained by the process were to in-duce confidence, and justify its adoption in cases of awkward forgings, which could be more easily formed by building up from bars than by hammering down from a large mass.

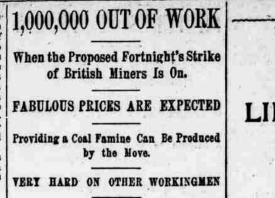
mass. In conclusion, it may be pointed out how the characteristic to which this paper refers-mamely, the greater fusi-bility of the interior of a mild steel bar as compared with its exterior portion—will assist operations in the manufacture of the Mannesmann tubes. Without asserting that the phenomenon in question plays an important part in the process, it is certainly interesting to note that, as the interior of the bar must be in a more pasty condition than the outside, being nearer its melting-point, the circumstances, if not actually conducive to the production of a hollow center, will at any rate offer little opposi-tion to the forces that induce its formation. tion to the forces that induce its formation.

#### BISHOP IRELAND & ROMAN PREFECT. Why the Minneapolis Prelate Was Called to

#### Italy by the Pope.

MINNEAPOLIS, March 2 - At the time of Archbishop Ireland's summons to the Vatican it was reported that he was to be raised to the Cardinalate, but it has since transpired that he went to Rome at the Pope's invitation to accept the position of Cardinal Prefect. The last time Cardinal Gibbons was in

Rome he showed the Pope the necessity of having an American Cardinal Prefect at the Vatican; that America, with its millions of mixed nationalities, must sooner or later burden the Vatican with more complaints than the Council of Cardinals would and time to



LONDON, March 2 .- As the time approaches for the inauguration of the socalled strike of the coal miners, who, on March 12, will quit work for two weeks, with the object of compelling such an ad-vance in the price of coal as will prevent the mine owners from reducing wages, the effect of the movement can be more readily gauged.

It would be an impossible task to approximately estimate the number of persons wh will be thrown out of work by the closing of mills, iron works, factories, etc., but it is certain over 1,000,000 employes will find themselves idle. With their families, it is believed that close to 5,000,000 persons will directly or indirectly feel the effects of the attempt of the miners to prevent any re-duction in their wages. Of the miners themselves, 460,000 men will take part in the strike.

#### Far-Reaching Effect on Other Trades.

The outcome is watched with more than usual the interest that pertains to labor movements, for the attempt is on such a gigantic scale that everybody who uses coal will be compelled to pay tribute in the form of increased prices, or, in the case of manufacturers, close down their works and lose the profits of their business. At Sheffield the rolling mills and the Forgers and Tillers' Associations announce that works

Tillers' Associations announce that works will be closed during the miners' strike. This decision affects thousands of cutlers, grinders and forgers. All of the employes of the engineering works, iron foundries and wagon building works connected with Lord Durham's and Lord Londonderry's collieries have given notice that those works will also be closed. Seven thousand railway employes con-nected with the collieries will also be thrown out of work. out of work.

The plice of coal in the Sheffield district has risen 3 shillings a ton. In Dublin there has been a still further increase, and the price is now up 4 shillings a ton.

#### Prices Bounding Upward Already,

The excitement continues at the Coal Ex-change, due to the rapid advance in the prices of coal and the uncertainty as to the point values will reach. Prices took another upward bound to-day, the advance amount-ing to 4 shillings a ton. In the towns in the northern part of England prices have risen

4 shillings a ton since Saturday. Of course the worst sufferers are the very poor people, who are compelled to buy their coal supplies in very small quantities. At the prices now demanded it is impossible for many of this class to supply their wants, It is claimed by many persons that there is no good reason for the advance in prices; that there is sufficient coal mined and being mined to supply the requirements for a short time, and that the sudden and alarm ing leaps in values are due entirely to specu-lators, who wish to dispose of their cheaply bought stocks at famine prices.

#### No Near Prospect of a Famine.

The miners are, as yet, working as usual, and the usual output is reaching the mar-ket. The strike does not begin for ten days. ket. The strike does not begin for ten days. The total supply in sight is not positively known, but it is thought that with the stocks on hand and to be acquired before the miners stop work, which can be added to by imports from Germany, Belgium and France, there is no positive dauger that a coal famine will be caused by the proposed two weeks' cessation from work. It is also thought if the only object of the It is also thought if the only object of the so-called strike is to make the public pay a

EQUITABLE LIFE ASSURANCE SOCIETY OF THE UNITED STATES. JANUARY 1, 1892. ASSETS.....\$136,198,518.38 Liabilities, including the Reserve on all existing policies (4 per cent Standard) and Special Reserve (toward the establishment of a 31/2 per cent valuation of) .... \$1,500.000 ..... 109,905,537.82 Total Undivided Surplus.....\$26,292,980.56 Income.....\$39.054.943.85 New Assurance written in 1891..... 233,118,331.00 

NEW ADVERTISEMENTS

THE

The Free Tontine policy (the Society's latest form) is UNRESTRICTED as to residence, travel and occupation after one year; INCONTESTABLE after two years, and "NONFORFEITABLE" after three years.

Claims are paid immediately upon the receipt of satisfactory proofs of death.

## HENRY B. HYDE, President, JAMES W. ALEXANDER, Vice-Pres't,

EDWARD A. WOODS, Manager,

516 Market Street, Pittsburg.



Electric Railways, at The Reia tion of Size and Efficiency in Transformers. Part Taken by Fittsburg.

"Pittsburg was represented, and very creditably, too, in two of the papers read. One was on "The Allied Powers," by D. Ashworth, medical and electrical engineer, and the "Relation of Size and Efficiency in and the "Frention of Size and Emclency in Transformers," by L. B. Stillwell, of the Westinghouse Company. Both these pa-pers were of rare interest, and were voted to be thorough and complete. "Another feature that strikes one as he is brought into contact with electrical peo-th in the practical operation of the art or at

ple in the practical operation of the art or at conventions where the discussions occur, is the fact that the electrical experts are nearly all young men. If is, of course, a young science, but the young and rising gen-eration are the ones who have mastered its details, practically apply the results and ar-gue most obstrusely for its future greatness, whether by inductive reasoning or by the combination of elements in the laboratory.

The Result of Electrical Effect,

"It is now generally admitted that all light is and always has been a result of electrical effect; whether the tallow dip as of old, the gas which followed, or the brilliant electrical light of to-day, and on up to sunlight itself, it is all electrical manifestation-different degrees of alternations pe minute, from say 250 to 500,000,000, but all producing light and in essence all the same This forms a great basis for future investi gations, conclusions and practical work. Even sound, heat and colors, as well as light, it is admitted, are but manifestations or a rapidity of motion, consequently all allied, and kindred from having a similar origin or cause. "So that from the fine inductive effect of a

transmitter to the generating power of Ni-ogara's fall; from the smallest motor that quietly does its that to the greatest motor that generators of electricity, the sun itself; from the little thought which germinates in the quietness of the laboratory—in its effort to make use of the forces of the Fathe of all laboratories-there is room for all thoughtful minds, and wonder and awe for those who follow alter.

"What it has in store for us I am most interested in. The comprehension of questions of such vast moment is one of the fine qualities of a thoughtful mind; it implies an effort to keep pace with the times. I feel so much interest in the subject that a desire to cause some similar interest in the minds of others is my only excuse for saying so much as a result of my trip to the Buffalo convention."

#### SARAH ALTHEA'S LATEST FREAK

## She Refuses to Leave a Hotel Room Until a

Miner Shames Her Out. SAN FRANCISCO, March 2 .- [Special.]-Poor Sarah Althea Terry broke out again last night, and created a scene in the Rush House, whe re she had engaged a room. On Sunday night she left Black Mammy Pleas aner's house, and said she was going to take rooms in Stockton street. Yesterday she met young Porter Ashe on the street, met young Porter Asne on the street, and he gave her money for her immediate wants. She then engaged a room at the Rush House, but when the proprietor discovered whom a room at the Rush House, but when the proprietor discovered whom he had under his root he played a trick on Sarah and asserted that the room had been previously engaged. She refused to budge, but when a big, strap-ping miner went up to the room made himself at home, lit a cigar and began to discrobe Sarah walked out yowing reto disrobe, Sarah walked out, vowing re-venge on Proprictor Seymour. As luck would have it, she ran across Seymour near the entrance, told him what she thought of him, and kicked him on the shins.

It is very evident that something will have to be done to restrain Sarah Althea, as she is so restless she will not remain in one place more than two or three days, and she is apt to fly into a rage on the slightest opposition to her wishes. Porter Ashe has promised to her wishes are the what monor she needs supply her with what money she needs, but she requires a guardian to look after her personal safety.

## A Coming Catastrophe

Is to be apprehended when the kidneys and bladder even partially cease operations. Rouse them with Hostetter's Stomach Bit-ters, which impels them to activity without unduly exciting them. Kidney disease is obstinate and destructive. Ward off the coming catastrophe with the Bitters, highly effective for rheumatism, dyspensia, constieffective for rheumatism, dyspepsia, consti-pation, malaria and is grippe. Sovereign in all.

#### Heavy Failure in the East.

Large consignment made to Thompson' New York Grocery and must be disposed of in a very short time. If you want bargains come quick, as they cannot last long at the

prices offered;
38 lbs rolled onts \$1 00
50 the nearl hominy
25 lbs lumn starch 1 00
40 lbs Butler county buckwheat 1 00
30 lb pail home made jelly 1 00
1 kit fat family mackerel 68
Scaled herring, 100 in a box
25 lbs lima beans 1 00
16 quarts navy beans 1 00
8 cans condensed milk 1 00
10 packages best gelatine 1 00
30 hars 5-cent wax soap 1 00
30 bars 5-cent floating soap 1 00 f
12 cans fine sugar corn
12 cans string beaus 00
1. Cans good peas 00
12 chus olackoerries
12 Cans standard tomatoes (3-10 Cans) 00 1
12 cans pumpkin (o-io cans)
12 cane 2000 (hole peaches (o-10 cans). 1 10
12 cans Dartiett pears (o-ib cans) 1 bu
12 cans green gage plums (o-iD cans) 1 (0)
20 IDS VAICACIA FAISINS 1 UU
20 lbs English currants 1 00
20 lbs Turkey prunes 1 00
20 lbs California evaporated peaches 1 00
20 lbs dried blackberries 1 00
50 bars best scouring soap 1 00   r
10 lbs dessicated cocoanut 1 00
5 lbs pure cocoa 1 00 r
4 sacks choice amber flour (guaran- t
teed) 5 00 0
To our city customers we will allow car f
fare on all orders of \$5 00 or more.
Goods delivered tree to all parts of both i
cities. To those living out of the city we 1
will prepay freight on all orders of \$10 and
upward to any station or landing within 100
miles of Pittsburg. Sent for price list.
M. R. THOMPSON,
311 Market street, directly opposite
and the second se
A WRITER on scientific bread-making 1
A WRITER on scientific bread-making
said recently that anyone who could read t
and could learn distinct rules could make s
good bread. He took it for granted that if
good flour must be used. There is none
better than Minnehaha flour. Ths

REAL ESTATE SAVINGS BANK, LIM.

ithfield Street, Cor. Fourth Aven 401 5 Capital, \$100,000. Surplus, \$75,000. Deposits of \$1 and upward received and interest allowed at 4 per cent. TTS

#### Cloth Walsts.

Fleishman & Co, are selling black, blue and cardinal cloth waists at \$1 95, regular price \$3.

#### Special Sale of Plates.

Our annual clearance sale of plates begins Thursday, March 3. Grand bargains. Call early, at Charles Beizenstein's, 152, 154, 156 Federal street, Allegheny, Pa.

TO-KA-LON SOAP, pure cocoanut oil, medicated and perfumed, 10 cents. Are You Going to Move?

Then read the to let lists in to-day's Dispatch.

What a Broken Crucible Disclosed.

It happened on one occasion that a crucible gave way in the furnace just as fusion was nearly complete, the greater part of its contents running out into the fire. The contents running out into the fire. The melter happened at that moment to bring the crucible out, and what he supposed to be an empty pot was found to contain a number of shells, having the shape of the pieces of steel originally charged, and show-ing that the interior of these had undergone fusion while the outside envelope remained

solid—a fact leading to the conclusion that the melting point of the interior mass was lower than that of the exterior coating. Two of the pieces found in that crucible are now shown. The larger piece, about 3% inches by 1% inches square, must originally have weighed about 41 ounces. It is now a

shell of 1414 ounces. The smaller piece, about 3 inches by 214 inches, by 36 inch, will originally have weighed approximately 2114 ounces, its shell now only weighs 834 ounces. From these figures it will be seen that the larger piece lost by fusion of its iterior about 2614 ounces, or 6414 per cent the whole; whilst the smaller piece lost % ounces, or 661% per cent of the whole in e same manner-two results that agree in he same manner—two results that agree in remarkable way. It would therefore ppear from so close a coincidence is if mild steel of the dimensions iven, having a sectional area of rom 2 to 2½ square inches, pos-essed a coating of skin of about one-hird of the whole mass with a higher melting point than the remaining two-thirds

ming the interior. How far such a fact may have affected the servations on the melting points of steel a aluminium alloysreferred to at the comencement of this paper it is impossible to y, but it will be perceived that if the same ogeneity occurred in their case as that hich has been described, discrepancies in number of observations are easy to ac-unt for. It is to be regretted that the mposition of the steel as it originally ent into the crucible is unknown.

Resistance to Fusion Easily Understood. Scrap was being melted, much of which ould be from cut up rail-ends, but the square ecce looks like a portion of a billet which ight have been of milder steel. At any te, both shells now only contain a mere ace of carbon, the amount not reaching to per cent, so that their resistance to can be easily understood.

The phenomenon referred to is, however, teresting in other ways besides in its re-ting to the subject of melting pints. Some such result might, for in-ance, be expected from the facts comance, be expected from the facts com-unicated to this institute in 1881 by Ir. Stubbs, and subsequently corroborated w Mr. Snelus, that carbon, sulphur, and licon become concentrated in those por-

ons of the ingot that remain fluid the ngest. This, of course, is the interior, so

the composition of steel may be, The Hammer Should Come Into Play.

Of course, subsequent treatment at the mill and forge, by subjecting the outside of the material to the oxidizing action of the air, will intensify the characteristics that make the outside of the ingot less funible than the interior, but that the skin, even in the hardest steel, is of a different nature and tougher than the interior, is a fact that will be confirmed by those who are in the and tougher than the interior, is a fact that will be confirmed by those who are in the habit of hamiling tool steel, which by hick-ing or just cutting through this skin, may be easily broken, when often the bars bend if struck without such preparation. What has been explained also brings into prominence the fact, that by turning and planing rolled or forged pieces of machin-ery, these are weakened in a disproportion-ait degree as the most' valuable part of the

ate degree as the most valuable part of the piece is removed. It is obviously advau-

consider, and that the only effectual way of giving the church in this country the atten-tion it merits would be to have a representative at Rome. This suggestion the Pope is said to have acquiesced in and promised to consider as soon as possible.

## CONVERTED & CLERGYMAN.

#### An Episcopal Minister Goes Forward at Illinois Methodist Revival.

SPRINGFIELD, ILL., March 2.-A. sensa tion has been caused here by the Rev. J. O. Babin, of the Episcopal Church, who has been in charge of the Gillett Memorial Chapel, and a tutor in ex-Governor Oglesby's family, going forward last night at the revival being conducted at the First Methodist Church by Evangelist Miller, and being admitted on probation to the Methodist

The reverend convert at once sent a letter to Bishop Sevmour, announcing his with drawal from the Episcopal Church, and ask ing to be deposed. Rev. Mr. Babin stated that the cause of his action was a disbelief in the apostolic succession, and that he thought the Methodist communion the more congenial.

TESTED by time, for-bronchial affections, coughs, etc., Brown's Bronchial Troches have proved their efficacy by a test of many years. Price 25 cents. TT55u

#### HOW WE DO IT.

#### How We Turn Dall Months Into Basy Me ments-P. C. C. C., Clothlers.

You have all heard of our \$7 25 men's suit sale. That's the secret of busy times at our store. The fact of selling men's fine suits worth \$14, \$15 and \$18 for \$7 25 draws the crowds. Prominent men, business men, nobby dressers, lawyers, brokers, insurance men, mechanics, artisans and salesmen have bought these \$7 25 suits.

Each and every man got double value for his money. To-day, Friday and Saturday are the last three days of this \$7 25 suit sale.

Make your own selection from our \$14, Make your own selection from our \$14, \$15 and \$18 pinchecks, small checks, narrow and wide wales, plaids, mixtures, fancy cross bars, herring bone patterns, plain black cords, hairlines and broken stripes for \$7 25.

The above suits come in sack or cutaway style, and are bound or plain, just as you

Earliest comers get the best patterns. P. C. C. C. Clothiers, corner Grant and Diamond streets.

IF your grocer does not keep Minnehaha flour write to Arbuckles & Co. and they will tell you the name of the grocer nearest you who does keep it. Ths

Read the to let lists in to-day's Dispatch.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*

**YOUR** TENANTS If not satisfactory can be

promptly replaced by better ones, through the medium of THE

DISPATCH ADLETS.

\*\*\*\*\*\*\*\*\*\*\*\*\*

so-called strike is to make the public pay a price that will warrant the mine owners paying the present rate of wages to the miners that end has been attained if the mine owners are reaping the benefits of the enhanced rates now ruling. An advance of four shillings a ton in one day, in addition to the other previous advance is compatible a based previous advances, is something phenom-enal, and allows of a margin of profit sufficient to guarantee the maintenance of wages. The mine owners in Lanarkshire have notified the men in their employ that if they strike none of them will be taken back except at a reduction in their wages. A con-ference was held to-day between the mine owners of Durham and the miners, but it failed to bring about an understanding be-tween the employers and the employes. TRY Piso's Remedy for Catarrh. It is handy and pleasant to take, and what is more does cure. All druggists, 50 cents. Th A Remarkable Cure of Rheumatism Messrs. Cage and Sherman, of Alexander Tex., write us regarding a remarkable cure of rheumatism there as follows: "The wife of Mr. William Pruitt, the postmaster

P

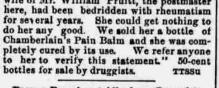
U

R

С

Ē

S



From a Prominent Allegheny Druggist,

ALLEGHENY, PA., March 16, 1891. Mr. Norman Lichty, Des Moines, Ia. DEAR SIR-I find Krause's Headache Capsules a ready seller, and can say from personal experience that they are a good thing, as the other night they cured me of a bad attack of neurologic in short one head had attack of neuralgia in about one hour, when usually it lasts a day or so. C. W. SMART.

BISQUE OF BEEF herbs and aromatics jars the stolid face into amiles.

MINNEHAHA flour makes 56 pounds nore bread to the barrel than the cheaper flours. Ths

To Let Lists In The Dispatch to let column to-day.

Be Right in Line With the Wise. Take Advantage.

Come early, and you will get the best chance. Biggest bargains ever offered in second-hand PIANOS AND ORGANS.

Must sell them at once; that's the reason we only charge you about one-third their actual value. All for sale on the MONTHLY PAYMENT PLAN.

You never have had a better chance than now offered to supply your family and children with a piano or

ramity and endored with a plano or organ. Prices astonishingly low. Planos from \$75 np, and organs from \$20 up. Good for years of service yet, more than some cheap new planos will give. Have music and good cheer in the family. Come and see us, and see how easy it is to get it.

to get it. MELLOR & HOENE. "Palace of Music," 77 Bifth avenue.

Camellia Flour is made in Pittsburg in the finest flour-ing mill in the land, and of the very finest wheat obtainable. It is the re-IS sult of 40 years of valu-able experience, and comes to the baker with THE QUEEN

a guarantee to give bet-ter and lighter results and prove itself the OF cheapest by making more bread than any other flour. Ask your ALL grocer for it. FLOUR





# If You Are Looking for a House,

at from the very commencement the out-le of the ingot acquires a skin of less sible nature than that of its internal ass. In a more or less marked degree the liquidation of the elements may be ex-pected to occur in all steel that has been cast in ingot molds, for the same cause is likely to operate in every case, whatever