## MACHINES FOR TYPE SETTING

Mechanical Marvels Recently Add to The Bee Newspan Lquipment,

DETAILED DESCRIPTION OF THE PLANT

An Inventive Triumph that is Working a Revolution in the Art of Making Newspapers-The Mergenthaler Linotype and Its Achievements.

Early in the winter of 1885 some of the larger newspapers of the country had their interest attracted to a type-setting machine that had been perfected, and was a great improvement over anything in that line then in use. On February 19, 1885, Mr. Rosewater, the editor of The Bee, received a letter from Meiville E. Stone, editor of the Chicago News, on the subject of the new invention. Mr. Stone had been investigating the merits of the invention, and in his letter, in which was inclosed a printed descrip-

tion of the machine, said: "The machine described in the slip is all that is claimed for it, and more. It was made in Baltimore. I have myself visited, the shops there and carefully examined and operated it. There can be no question that it dooms the trade of the compositor, and is actually the thing which all persons having capital invested in printing offices, and especially in newspapers, have so long sought, and so long awaited.

"The machine and all the patents covoffice in Washington. The gentlemen in the company are not familiar with the trade, but have taken the stock as an investment, The history of their connection with it I do not consider it necessary to relate now. The point is, and to properly advance the use of the invention, they are willing to place with a party of gentlemen engaged in the newspaper business, one eighth of the entire stock, and to that eighth delegate by a sufficiently binding contract or agreement, a majority voice in the board of

"The capital stock of the company is \$1,000,000. This is divided into 40,000 shares of \$25 each. The stock has advanced to double par, and is still rising. None of it can be had for less. Of this I have satisfied myself. I am in possession of a written proposition covering the one-eighth mentioned at that figure, conditioned that it shall be placed with men in the business for the purpose I have named. If the proposed syndicate be formed I would take 500 shares for myself and Mr. Lawson, my

partner. I wish you would join and take a similar amount." The editor of The Bee was not in position at that time to join in the proposed enter-prise, but took a lively interest in the inven-

Mr. Resewater expited a cast of his name and address made by the original machine, whiche still retains as a souvenir, and told mechanical superintendent and others the typesetting trade was sure to be revolu-tionized and that the typesetter would be superseded by the typecaster. This predic-tion is now being rapidly fulfilled. More than 1,000 linotype machines are now in suc-cessful operation. The company now has three large factories running full blast, one

at Brooklyn, one at Battimore and one at Toronto, and are unable to fill the orders. As usual The Bee is the pioneer in intro-ucing all the mechanical devices in connecon with the art and business of printing in this section. It is a matter of history that The Hee brought into Omaha the first single cylinder Hos press, the first double cylinder Hos press, the first Chambers newspaper folding machine, the first automatic Dexter folding machine, and the first web perfecting press. It was in the natural order f things, therefore, that the first typeset-ing machines should find their use in Omaha in The Bee office. plant in use in The Bee office consists

of a battery of twelve machines, arranged in a row on the north side of the composing room. It is a matter worthy of note, too, that no other newspaper building in America has the space to accommodate so large a number of the machines in the manner in which they are arranged in The Bee offic and publishers who have examined the plants of the largest newspapers in the ountry unhesitatingly refer to The Bee plant as the model in point of excellence of arrangement. The machines were ordered from the factory in December and were received at Omaha the latter part of The usual custom is to rent the

January and put in operation on February 1 The twelve machines cost \$3,000 each at the machines, but those in The Bee office were bought outright, the management being assured of the success of the invention. It is also usual for newspapers in adopting the machines to employ expert operators in order to get the full benefit of the machines ering it and its parts (about 300 altogether), from their introduction. The Bee did not follow this custom, but selected its operators are in the hands of a company having its from the union printers who had held cases under the old order of things. In this way many of the regular caseholders of the paper were given employment, the reduction of the composing room force affecting chiefly the substitute printers who were not regularly employed. The scale of wages is larger than that carned by the hand compositors under the old system. The operators are paid \$4 per night for work on the morning paper and \$3.50 per day for work on the evening paper. No operator works more than eight hours a day and has no distribution, which required at least two hours each day under the old rule and for which the printer received no compensation.

SOME TECHNICAL POINTS.

the operators.

men, receive the same wages that are paid

How the Mergenthaler Does Its Work with a Single Operator. The machine is named after its inventor,

a watchmaker named Mergenthaler. It is a mass of invention, fairly bristling with ingenious contrivances to do tasks that many men have said never could be done by machinery. For instance, there is spacing out. Upon closely scanning a printed page it prise, but took a lively interest in the coven-tion which has since taken the place of the hand compositors on The Rec. Soon after the first letter from Mr. Stone Mr. Rosewater first letter from in other lines. A printer setting by hand

CHICAGO DAILY NEWS.

EDITORIAL ROOMS

Dear Fir:
There will be a private meeting of a few gentlemen at Barnis Hotel, Baltimore, next Thursday the 12th ist, to look gou are invited to be present.

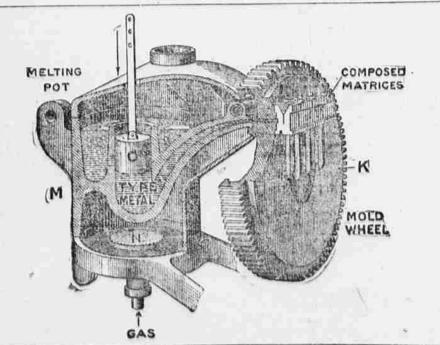
At that time all details concerning the affair will be cleared up. Very truly yours, Melorte Estone

E. Rosewater, Esy & Omaha Bee ?

At that time Mr. Stone was one of the proprietors of the Chicago Daily News and is now general manager of the Associated press. On the day designated in the invitation about twenty prominent newspaper men gathered in Baltimore to inspect the first linotype machine. Among those present were: Whitelaw Reid of the New York Tribune, Stillson Hutchins of the Washington Post, Richard Smith of the Cincinnati Commercial-Gazette, Edward Rosewater of The Omaha Bee, Melville E. Sione of the Chicago News, William N. Halderman of the Louisville Courier-Journal, J. M. Abel of the Baltimore American, Henry Smith, then general manager of the Associated press and W. F. Rand of Rand, McNally

which served as the first factory of the

comes close to the end of a line and finds that he cannot get into that line the next word or a divisible part of it, and he at once proceeds to drop extra spaces between the words until the line is full. The Mergenthaler machine does this automatically, not by dropping in extra spaces, but by an equally simple and much quicker plan. The machine spaces are about four inches long. They are made like a wedge. By touching the space key they are dropped into the proper place. If the line is not full the wedge shaped spaces move up until it is full. Then the line moves swiftly to its mold.
It must always be remembered that the line set is not of type. It is of little brass matrices, one matrix to each letter or figure, and the matrices form a mold from which a The party was taken to a small shop, solid line of type is cast by the machine. Several cuts are herewith printed, showing



Mergenthaler linetype machine. The first Mergenthaler inotype machine. The first machine was there exhibited by its inventor, Mr., Mergenthaler, who took great pains to explain the machine and its various parts and workings. Compared with the latest improved linotypes, such as in service at The Bee office, this original machine was a very clumsy and complicated affair. Its main features, the typewriter keyboard and

the line-casting mold wheel, were the same as on the machines now in use. On the heels of this inspection of the machines the company was reorganized with a large amount of capital to push the manu-facture of the machine. In this company were William Henry Smith, Richard Smith, Whitelaw Rold, and a number of other pub-

the machine complete and several of its most interesting parts. By studying the one which represents the melting pot and the mold a person not a mechanic can get a fair idea of how the line is cast. The metal pot is equipped with a pump which moves automatically and squirts a portion of molten metal up through the curved passage to the line of matrices, which form the mold. In a moment the line is cast, released from the mold and thrown out in regular order, follow-ing those which preceded it.

Distribution of the matrices after they are used is another difficult task most ingeniously accomplished. The method is explained

the magazines from which they are started are concurrent. Thus it is that the machine is adapted to operate beyond the speed of most operators.

The distribution of the matrices back to their magazines is perhaps the most ingent-ous, and certainly the most interesting fea-ture of this triple production of one mind. After the line is cast, a long arm comes automatically from the back of the machine to the matrices, picks them up with the facility of a buman hand and lifts them to an endless screw at the top the principle of a Yale lock. As they slide along the screws they hang ou by these inicks, which are so arranged that when one of them reaches its channel the nick looses its held and the matrix drops into its proper place in the magazine, ready

experiences a gain not merely in the matter at his right, and the space bars of distribution, but in correcting the proofs. do all the work of justification, all of them

No. of Street, or other Persons and the Person

make mistakes. It cannot set a letter up-side down, nor can it get a wrong font.

MACHINE IN DETAIL.

Process by Which the Work is Done Fully

photograph giving a front view of the ma-

As will be apparent at a glance, and as

suggested by the name, "linotype," the pro-

duct of the machine is a casting represent-

ing a line of type, the assembling of the

matrices for each letter or character in such

line, and the proper placing of the spaces,

being effected by the touching in proper or-der plainly marked keys, as in operating a

typewriter, the rest of the work being auto-

are in the keyboard ninety of these keyes, this being the capacity of the regular ma-chine as to the number of different types

The magazine consists of a casing sup-ported in nearly vertical position at the top

MELTING

of the machine, the top and bottom plates of such casing being properly grooved to form channels in which the matrices lie loosely, on one edge, the bottom of the matrix touching the top of the one below it, so that they slide down freely when released by the key. There are two escapements at the

key. There are two escapements at the mouth of each channel, at its lower end, con-nected by a rod with the key lever, their

berm being such as to insure very rapid operation and still prevent the release of more

represented in upper and

lower case letters, figures,

Each of these characters is

borne upon a thin brass

the figures, the mold or

matrix proper for forming the face of the letter being

at "a," in one vertical edge of the piece, while in its

upper end is a series of

teeth, "b," by means of which the matrix is re-

turned, after the casting is made, to the magazine.

of the machine, the top and bottom plates of operation of the machine) and then shifts

ation and still prevent the release of more than one matrix on the key being touched. In leaving the mouth of the magazine the matrix drops down a vertical chute, whose front is covered by a glass door, the thutes at one side being of gradually diminishing length, so that the bottom of the chute section forms a slight incline, just below which, and at a corresponding inclination, is a fast gunning belt. The object of this arranges—

the open upper ends of the magazine channels, and on the lower edge are formed inclination either or ribs adapted to engage the teeth on the tops of the matrices. But a matrix bearing any given letter differs, as to the number or arrangement of its teeth. From a matrix bearing any other letter, and the ribs of the distributor bar vary corresponding belt. The object of this arranges—

the open upper ends of the magazine channels, and on the lower edge are formed longitudinal teeth or ribs adapted to engage the teeth on the tops of the matrices. But a matrix bearing any given letter differs, as to the number or arrangement of its teeth. From a matrix bearing any other letter, and the ribs of the distributor bar vary corresponding to the properties of the matrices. But a matrix bearing any given letter differs, as to the number or arrangement of its teeth.

it laterally until the teeth at the top of the

matrices engage teeth on a carrier plate

R, as shown in deried lines, this plate, with the line of matrices, being then raised to

the distributor bar at the top of the maga zine. The spaces remain behind when the

matrices are carried up, and are transferred

matrices are carried up, and are transferred laterally to their box or holder. The distributor bar occupies a fixed position above the open upper ends of the magazine channels, and on its lower edge are formed longitudinal teeth or ribs adapted to engage the teeth on the sops of the matrices. But a matrix bearing any given letter differs, as

punctuation marks,

matically performed by the machine.

Explained. The accompanying illustration is from a

chine as now built.

that are not in a direct line vertically with the place of assembling, and by this means matrices farthest off come into their position as quickly as those which are nearest, there being no transposition of letters when the machine is worked at its highest speed.

The matrices, in the order in which the keys have been touched, are delivered to a slotted assembling block, G, where they are held loosely suspended by their shoulders, and gradually pushed along as the line is being formed, the spaces being dropped in position from the space box, H, by touching the space bar, J, in the same way as the type keys. As the different characters drop into place the operator can readily read and correct the matter as he proceeds, each matrix having on its back an impression corresponding with the female die it bears on the esposite eige. The spacing, however, assembling, as the operator may desire to presents one of the most interesting fea-use it. So perfect is this system of distri-bution that no letter can get into the wrong channel, and the matrices are in continuous and bottom parts together its thickness is Thus it will be peen that the operator thickness at the top and bottom of those Is relieved of the task of dirribution, portions bearing against the matrices, which under the old system of hand setting occupied two or three hours every day.

In fact the operator has his whole time that it will not hold another word or part o devote to getting up the matter, and he of a word, he simply presses upon a lever

PERSPECTIVE OF THE MERGENTHALER MACHINES OPERATED IN THE BEE COMPOSING ROOM.

spacing will be entirely "even." At the same time the line of matrices is automatically engaged by clamps and transferred, as

shown by the arrows, to the face of a verti-cal mold wheel, K. through which extends

is forced by means of an automatically working plunger, when the line of matrices is presented and locked against the face of

the mold. The metal is easily kept at the

proper temperature by a simple device, but

rarely requiring any looking after when once adjusted, and the cast body, being of a

thin piece of metal, solidifies almost as soon as it touches the mold. The mold wheel

then makes a partial revolution, when a

blade or plunger pushes, the linotype out,

and between trimming knives, depositing it on a galley at the front of the machine

As this is done the knives leave shallow

vertical ribs on the side of the linotypes, or slugs, and it has been found that these

ribs serve a valuable purpose, giving air spaces, facilitating the drying of the papier

mache stereotype molds now used by most of the large daily newspapers. A vibrating arm advances the linetypes along one after

the other upon the galley, so that they thus come together in column form.

After the casting of the line comes the distribution of the matrices again to the

magazine, the operation being entirely auto-matic, and being one in which the eminent

In the first place there are no errors result- being simultaneously closed up sufficiently

ing from faulty distribution, because the to lengthen the line to its full predetermined machine, being perfect in action, cannot measure, with absolute certainty that the

enabled to have a new dress each day, in-

ment is to increase the speed of the matrices | such in cross section, over each magazine channel, that they will not, at this point, held up the particular matrix designed for such compartment. The matrices, when they are placed in suspension at one end of the bar, are pushed along it by means of longitudinal screws, each matrix remaining in engagement with the bar until it arrives over its proper magazine channel, into which it drops, ready for use again in the formation of another line. The work of distribution is thus carried on continuously, simultaneously with that of assembling the matrices. The number of pieces with which each magnine is furnished, to render it certain that there shall always be enough of each character for the line being composed, the one being cast and the one being distributed, is fixed upon the basis of a supply of twenty-six matrices bearing the letter "c," all the other characters of a fount being provided other characters of a fount being provided in proportionate number, according to the well understood practice of the trade. There is, therefore, no such thing as being short of type, because of an excessive amount of "standing matter," in any office where the machine is employed. Any good stereotyp-ing metal may be used in the machine, the world being smoothed and daing duty over metal being remelted and doing duty over again almost indefinitely, although it is rec-ownended occasionally to add thereto a

stead of being compelled to use old and dull

faces as in the case of ordinary type re-quired to do service for long periods of time.

The usual heavy investment demanded in purchasing and renewing type is also wholly

avoided, as is the great loss from the break

age and wear of type. The mold wheel, in the illustration, is represented as having

chine is the work of

with one magazine,

tionately larger

then

His hands were large, and, to look at, any thing but facile in movement. He sprea them out over the keys, and with only the slightest motion of any one finger kept his machine piling up strings of type in the re-ceiver at his side. One wondered how he could do it. He didn't seem to know him-"I suppose it's a gift," said he. "I don't I suppose it's a gift, said he. I don't know why the other fellows don't do it just as fast, but they don't seem to."

Then he told his story. He is Lee Rellly, and is not quite 27 years old. He was born in Bowling Green, Ky., and learned the printer's trade in Louisville, having been employed at the case in the composing room of the Courier-Journal. When the old-fushioned linetype was introduced into that office Relly went to work at one and be-came a skilful operator. In fact, he made some protty good records on that old maline, and doing anything with them was mothing of an achievement in the primi-ve days of linetypes. "Those old ma-nines are what drove me to drink," was s laughing way of expressing his opinion

> All this took place in the composing room of the Tribune, where Reilly has a new ma-chine, which is his special pet, fixed with the spacing key at the particular angle that he finds most convenient. He did no care much to talk about his record. "For," said he, "the boys will think I'm stuck on myself and feel above them, and that isn't When a fellow thinks he's too smart everybody takes pains to jump on all his blunders and make it unpleasant for him I'd rather work along quietly with the boys. Some people have asked me to write a story about typesetting, but I don't want to. I don't know as the others work much differently. Only I suppose they use one or two fingers and make more motions. Then, too, the most of them strike twice for double letters, but you don't have to." With that he turned to the machine and showed how by leaving a key for an almost imperceptible space of time beyond the mere touch a second matrix could be thrown down, and a string of them, for that matter, in the exact number required by a slightly longer but carefully regulated He could throw several down in this way before he could have had time to make a second stroke had his finger

to make a second stroke had his finger once been fully removed.

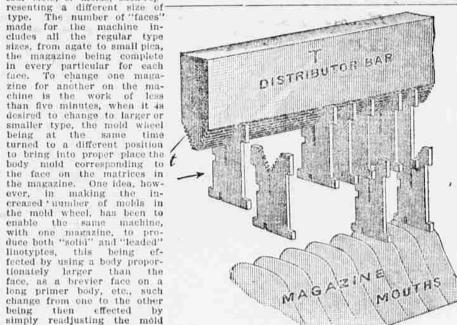
Then Reilly went on setting type, hardly to show his skill, for he was laughing and talking all the time and hardly keeping his deep-set eyes on his copy. He held his left hand almost on edge at the keybeard, instead of directly over it, and there had unstead of directly over it, and there had unstead on the first second and third. der the ends of his first, second and third fingers the lower case letter most used, while he atruck letters and spaces indiffer ently with the second finger of either hand. The right hand he used mostly for the figures, capitals and punctuation marks, as well as to work the lever to carry the assembled line of matrices to the casting appara tus. He assembled these lines so rapidly that unless the machine was geared to run at a rapid rate he would often have to walt take its place and give him a chance to go on setting. Even when setting at this rate he watched his matrices, and often would eatch a misplaced letter and set it right without waiting for the proofreader to de-tect the blunder later on. This habit saved much time for him in the end, for every mis-take corrected after the type is cast requires the setting of a whole line and the hunting up and placing of it in the proper place in

the string of type.

Another element of Rellly's rapidity is said to be his memory. He catches a number of words of copy at a time, and sets them without watching his hands at all, keeping his eye on the brass slips as they come tumbling into place and seeing that they are all right. By the time he is at the end of his phrase, however, without the least paise he has caught another group of words and so goes merrily on, setting his 50,000 or more "ems" a day. The feat which gives him his record was

the setting and correcting in the Tribune composing room of 411,200 "ems" of nenpa-rell, not more than one-fourth of which was "leaded," in six consecutive nights of eight hours each. His daily record was: Friday,

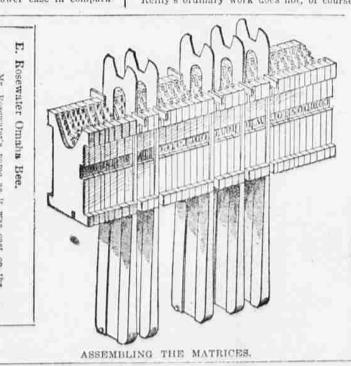




superiority of this machine is most con-spicuous. For this purpose an arm lifts the line vertically, (see illustration showing) wheel. DISTRIBUTOR A recent feature in the development of the machine and its adaptation to news-paper needs consists in the Months and all the state of the furnishing of a magazine specially adapted for the composition of display heads. This magazine has one font of capital letters, large sized type, say a plea gothic condensed, another of upper and lower case in compara-MATRIX MAGAZINE

tion, 65,000; Saturday, nine hours and thirt; minutes, 72,000; Sunday, seven hours and thirty minutes, 50,500; Monday, seven hours and forty-five minutes, 65,500; Tuesday, eight hours, 74,500; Wednesday, eight hours and five minutes, \$3,700. Thus it was just five minutes over the six days of eight hours each in which he did the work. His copy was taken from the book as it came, just in the same way that it was taken by other

Reilly's ordinary work does not, of course,



tively small size, as nonpariel full face. With this magazine the regular "dis-With this play" heading, as seen in many newspapers, may be quickly formed with line-

HOW HE HANDLES THE KEYS.

Marvelous Speed of the Champion Linotype Operator of the World.

New York Tribune: He sat before a line type machine striking the keys with an almost imperceptible motion of every one of his fingers, and making the little brass slips from which the type is cast come jingling down from their reservoirs like wheat from an elevator chute. Everybody said he was the fastest typesetter in the world, and one who did not know was not inclined on his return from the visit to Baltimore, ing from another and distributing a third to the properties.

On his return from the visit to Baltimore, ing from another and distributing a third to the properties of the distributing a third to the properties of the distributing a third to the properties of the distributing a third to the history and arrangement arrangement and arrangement arrange

keep up to this spurt, but his daily average right along is from 44,000 to 55,000 ems a day, while that of the next best workmen in the office—and there are many expert compositors there-rarely averages over

Hurt His Reputation. Indianapolis Journal: "See here," said the citizen with the large neck, as he put a

stubby finger down on a copy of the paper, "dis here item says dat I got a contract workin for the state." "Well," said the editor, "we understood that you had been awarded a carting con-

nex' paper. De way it come out, widoni sayin' what de contrac' was, about half ma frien's will t'ink I been sent to de pen."

## PUT THE AUDITORS TO FLIGHT

Captain Jack Crawford's First Experience as an Impressario.

BRONCHO AND MULE FLED AFFRIGHTED

Enthusiastic Beginning of a Burns Celebras tion in Arizona and Its Melancholy close-A Warning to Would-Be

Vocalists.

Captain Jack Crawford, the poet scout, was invited by the Scottish clans of Janesville, Wis., to help eclebrate Burns' birthday, anniversary. He had to forego that pleasure, as he appeared at the Burns celebration at the Amiltonium in Chiesgo. Cartain Jack, in regretfully declining the honor of the Janesville clan, sint the following unique account of a Burns celebration he once improvised in Arizona, at which he was crater and bard, to the great disconditure of an audience consisting of a horse, a pack mule and a slinking coyote:

I was at the time in the employ of the United States government in the capacity of a scout, and was returning from a long and at times dangerous chase on the trail of the Apache chief, Nana, who, with a few followers, had broken away from the re-servation, and after indulging in their highly enjoyable recreation of mardering a few settlers, had fled for safety into the fastnesses of the Sierra Maire mountains in the republic of Mexico. I had trailed the depredating band to the boundary line, and as it would be a violation of the international laws for me to cross over, I reluctantly took the back trail for the military post at which I was stationed.

A LONESOME CELEBRATION.

One morning, when but a day's ride from One merning, when but a day's ride from the post, I had packed my pack-mule, sail-dled my horse, and just before mounting opened my diary to jot own the happenings of the previous day. I noted the date, January 25, and like a flash it came to me that it was the dawn of the natal day of our Bobby Burns. In a minute the pack animal was relieved of his burden and the horse unsaddled, for I determined that, though alone in a wild country many substitutions. though alone in a wild country, many miles from a human being, I would observe the day and do henor to the memory of one whom my father and mother, now in the realms of the blest, had taught me to love

and revere.

Staking my animals out to feed on the nutritious grass which grew along the beau-tiful stream on which I had camped, I per-formed a little duty which I had overlooked before breakfast; I washed my hands and face in the waters of the dancing brook While enjoying this semi-occasional luxury I imagined I could hear the familiar airs of Scotland in the music of the waters as they danced merrily adown the rocky bed:

The brook with liquid tongue
The airs of Scotland sung,
ness with soft and dreamy music laden—
While dancing near my feet
Its mithems came as sweet
to trillings of a merry Scottish maiden.

Why not colebrate the day? Why not sing the songs of Scotland and deliver an oration to my animals, to the wolves that prowled about, waiting for my departure to snap up and quarrel over any scraps of meat I might leave behind, and to the so birds that flitted from bough to bough the trees which marked the course of the stream? To add interest to the program I might even dance a Highland fling, and, as it was not at all probable that Indians were near, fire a salute to the memory of the plowman poet from that tried and true com-punion and friend of all western men, my Winchester rifle. I began to get terribly in carnest over the novel idea, and to destroy the impression that may be as-suming shape in your brain, my dear brother Scot, that I was drinking, I will assure you that I never took a drink of intexicating liquor in my life. It was an outbursting of native-born patriotism

I concluded that the song "Scots wha ha" would be a proper opening of the program. Running the scale in somewhat startling tones to see if my voice was in tune I noticed that my horse and his associate raised their bends, and, with ears leveled at ne, as if they were threatening six-shooters, that I must not carry that sort of work too far. At the same time a wolf disappeared over the brow of a sand bill near by, his tail endeavoring to hide from public view between his hind legs. The critter had instinctively caught the idea that I was going to sing and determined to escape before it was eternally too late. Nothing daunted I assumed a dramatic pose and began the song. As my wild, weird notes shot forth and chopped the air about me into di-cordant fragments I grow enthusiastic at sung as mortal never sung before. As t stirring notes of "Scots who ha" wi Walla-bled" went echoing and cayorting throuthe adjacent hills and shot in vocal streaks up and down the erstwhile peaceful valley. my animals, in affright or rage, I am sure I don't know which, pulled their picket pins and started in seemingly unlue haste for a and started in seemingly in the hoste for a destination which they neclected to heave with me. The mule after a few who loaps, fell over and over, his experienced hind logs kicking at some imaginary object in the air above him, but whether he stumbled r fell in a paroxysm of fright I have never et been able to learn. The last view **r** ecured of the long-cared beast of burden ne went over the top of a hill with his tail pointed rigidly at the mysterious realms above and his hoofs beating great clouds of dust from the historic soil of Arizona.

MUSIC WITHOUT CHARMS. The horse came cantiously back in a couple of hours to see if I had got over the fit-came slowly, seep by step, seemingly ready to run again should the circumstances require it. By soft words and expressions of deep regret over what had occurred I succeeded in restoring his confidence, and mounting him I went in search of the donkey's stepson. I righted him two miles from camp. As I approached he gaised his head and brayed a bray so excrucialingly uncarthly that my horse stopped in affright, and then the Tong cared vocalist looked at me in a questioning mainer as if he would say: "Will you make a noise like that again if I bet you catch me?"

I did not carry out the roat of the program. I quietly at a flurus anniversary dipner, consisting of bread made of Kansan flour and a baking powder which, in the mind of its manufacturer, had won 1,000 medals in as many contests, bacon of great force of character and ripe old age, beans which had lost none of their vitality through long isolation from the haunts of men, and coffee of the usual Samsonian muscularity. That was my first participation in the cel-ebration of a Burns anciversary, my friend. Yours will be the second, if you are really erious in your assurance that I shall have Hittle corner in the program. It will be well for you to warn your people against hitching horses near the score of the trouble, and caution them not to crive by while I am in an active state of eraption.

New Antidote for Worphine.

Dr. William Moor of New York, a special-ist on therapeutics, has discovered that per-manganate of potassium is an antidote for morphine poisoning and that it will counteract within a reasonable length of time the effects of any of the salts of oplum. Dr. effects of any of the salts of opium. Dr. Moor, in the presence of twelve members of the West Side German clinic, who assembled January 9, swallowed what is ordinarily a fatal dose of morphine. His fellow physicians attempted to dissuada him. Some of them left the room, declaring they would not countenance such madness by their presence. But Dr. Moor persisted in committing "smielde" with the utmost cheerfulness. Then he swallowed his new found antidote. Deadly languor and death must have Deadly languor and death must have followed ordinarity, for Dr. Moor awallowed three grains of the drug a positively fatal doze in his case, as he is supersensitive to the effect of narcotics, but the permanganate of potassium did its work well. In the busi-ness of the meeting which followed the ex-periment no head was clearer than Dr.

Hot Weather in Australia

eral degrees the temperature of the city streets