

Red River Prospector.

RED RIVER, - NEW MEXICO.

PRINTING WITHOUT INK.

Process That Is Proving a Great Success in England.

Printers are said to be much interested in the work of an English photographer, a Mr. F. Greene of London, who has met with considerable success in producing a paper by means of electricity which may be printed upon without employing inks or the use of any previous sensitizing matter by saturation, as has hitherto been done. Instead of saturating this "electrographic" paper with the sensitizing materials, as has hitherto been done, it has been found best to mix them with the pulp in the process of manufacture, and so a radical departure has been made and a new machine-made paper has been invented that has rare properties. The chemicals used are abundant and cheap, so that this paper can be produced as cheaply as common paper. The prepared paper is stable and colorless, it is unaffected by any other agent than the electric current; may be kept indefinitely and sent to the press directly from the roll as manufactured, with no preliminary treatment whatever; yields instantly a dense black, permanent print, requires no subsequent fixing or development; indeed, is ready for distribution immediately, as there is nothing like ink to smudge or require drying; briefly, it meets all the requirements of a perfect medium for electric printing. The machine for electric printing is simply an ordinary press divested of all its inking mechanism and having the cylinder or paper-bearing surface covered with a suitable conducting metal. The work of "make-ready" is the same as for ordinary printing, and line blocks, electrotypes, wood cuts, half-tones, engravings, and all kinds of designs in relief may be used at will. The form is connected with one pole of the dynamo or battery—for most purposes the current may be taken from an ordinary incandescent light wire—the paper-carrying cylinder or surface is connected with the other pole. Thus the metal surfaces of both cylinders are the electrodes, while the paper is in reality a very thin cell in which the pulp is an inert medium and the contained chemicals the electrolyte which is to be subjected to electrolysis. As the cylinders approach each other to press the paper as it is fed between them, the current is switched on automatically and flows from one cylinder through the paper at the points of contact to the other cylinder, the impression being produced instantly by electro-chemical action.

BROKERS IN INVENTIONS.

Disappearance of the Unscrupulous Speculator—Odd Ideas.

Inventors, as every one knows, are deficient in business sense. Left to themselves, they seldom realize great profit from their work. They offer a golden opportunity to business men, who are not slow to take advantage of it. Two types of men make their living out of the inventor. One is the speculator, the other the legitimate broker of inventions. There are not so many speculators as there used to be twenty years ago. Many made fortunes out of the simple-minded inventors. The most notable case was that of one who bought ten patents from a poor fellow in Washington for \$3,000, and in the next ten years cleared nearly \$1,000,000 on them in this country and in Europe. Brokers have progressed steadily and are now members of a recognized calling. Many of them are thorough mechanics and good, practical scientists. Such as these are bound to be successful. Others are merely clever salesmen, who at times make money and at other times their labor for their pains. Their calling is full of odd and interesting features. They meet inventors of every type, from those who have genius to those who are cranks and dreamers. It is among the latter that they find queer inventions, some of which, though ingenious, are not patentable. One of these was a policeman's club, which at the end was perforated so as to form a red pepper box. A small spring in the handle opened the box and enabled the wielder of the club to blind his enemy as well as to beat him. A second spring threw out as radii from the club a number of small knife blades, which would cut to pieces the hand of any one who tried to snatch the club away. It was refused a patent by the examiners on the ground "of its cruelty and inhumanity." Another non-patentable invention was a lady's fan, in the stick of which was concealed a poisoned dagger.—New York Post.

Norse Soldiers Use the Ski.

In Norway the ski is in constant use during the winter and the ease with which great distances can be covered is surprising. Peasants are thus able to get about their work and visit friends in far-away districts. Sportsmen, with gun on back and stick in hand, set out in pursuit of game on ski, and the soldiers are reduced to this means of getting about when exercising. A regiment of soldiers on ski is a sight by no means uncommon in and around Christiania.

George H. Adams Builds Hotel.

George H. Adams, for many years a Milwaukeean, who went to Colorado thirty years ago, is erecting a hotel at Denver at a cost of \$125,000. The hotel will have a roof-garden 125 feet square.

STORIES FROM OUR EXCHANGES

The career of Jonathan Prentiss Dolliver, the mountain boy who became a senator, is entertainingly described by Cyrus Patterson Jones in Success for March. The senator's love of humor is thus described:

"His wit is one of the most attractive of his gifts. He can tell a story with wonderful effect. His keen sense of humor would have made him a comedian if nature had not cast his other faculties in a more serious mold. Therefore his fun only crops out at times.

"When I asked him when and where he first began to consider himself famous he said:

"My first term in congress gave me my first sense of exaltation. The people up in the Iowa hills had a little lake, and they named it after me. Then



"LETTERS POURED IN ON ME."

a new postoffice was named in my honor, and a colored woman named her baby after me. I began to think of engaging a niche in some temple of fame.

"But, in my second term, I was disillusioned. A climatic disturbance dried up the lake, free delivery wiped out the postoffice, and the child died—and I found myself back at the very place whence I started!"

"A few years ago Mr. Dolliver was invited to deliver a lecture in St. Paul and Minneapolis, Minn., before the Young Men's Christian association lyceum. In each city the hall was crowded, some 1,500 young men attending. His topic was 'Chances for Young Men.'

"That," said he to me, "was a favorite topic with me. As in the case of your own publication, I believed in young men, and liked to talk with them, knowing full well that if one can stir them up to energy and ambition he is doing a grand work in the world.

"Well, I have not changed my opinion since the delivery of that lecture, but, when I got back to Washington to resume my congressional duties, a week later, I began to hear from those particular young men. Letters began to pour in on me. They came in bunches of two and three, then four, and finally in basketfuls. Every St. Paul and Minneapolis young man who had heard me declare that this is the young man's age wrote that he fully agreed with me—and asked me to get him a government job!"

INDIAN GIRL IN ROME

"She is the brightest, most winsome little tot of a girl that we've brought across the Atlantic in many a day," said Commander Englehart of the North German Lloyd liner Kaiser Wilhelm der Grosse yesterday morning, reports the New York Times. The object of his praise was a 9 year old Indian child from the Rocky mountain region of Montana. Kollinzuten, which in the court language of the Flathead Indians means "child of God," is the name of the diminutive maiden, who, when she landed, promptly informed an admiring coterie that surrounded her on the pier that she was just returning from Rome, where, with



KOLLINZUTEN.

Mother Provincial Mary Amandeus of Helena, Mont., she had gone to see Pope Leo.

Kollinzuten is an inmate of the convent of the Ursuline nuns at Helena, Mont., an institution where nearly 500 Indian children are being educated.

"This little girl," said Mother Amandeus yesterday, "accompanied me as the representative of the 500 Indian children who are being educated in the process of Helena by the Ursuline nuns. Dressed in the costume of her people, with her gay feathers and bright-colored dress, she was presented to the holy father. When she appeared his holiness exclaimed in his eagerness, 'Who is this child? Who is this child?' blessing her several times during the audience. Kollinzuten is a member of the Flathead tribe—a tribe that boasts of never having shed the blood of a white man."

COULDN'T FIND THE MAN

One of those drummers who does a good deal of driving about the country delights in telling about an old-time boniface who runs a country hotel within a day's drive of Detroit, says the Detroit Free Press.

"Sharp as a tack," declared the drummer. "Always as smooth as oil until some one tries to make a run on him, and then he can get back harder, faster and in fewer words than any man I ever heard talk.

"I saw a man come in there one day



"WHERE'S THE MAN?" ASKED THE OLD CHAP.

from the city. He is all right at home, but was feeling his oats that day, and opened up on the old landlord by saying: 'Hello, granddaddy, get your frame into circulation. Don't set around here like a bump on a log. I want accommodation for man and beast.'

"Where's the man?" asked the old chap, in a flash."

TRAIN YOUR BOYS.

Sons Should Be Orderly and Systematic in the House.

A wise mother will impress upon her sons, as well as upon her daughters, the importance and comfort of being orderly in the household. It is usual for the mother to strive to make her daughter systematic and tidy, to induce her to keep her bureau drawers, her closet and her room in order; to put away her clothes carefully, and to make her bed properly; but the boy has all these things done for him, and, consequently, never learns orderly habits, unless they come to him by nature. There is no sense in this distinction between the boy and the girl. Neatness and orderliness in regard to one's room and surroundings are as essential to a well-bred man as neatness of person, and the boy is at a disadvantage in whose home-training these points have been neglected. Mothers know that their sons are liable, after they are grown, to be away from their care for years before establishing homes of their own. It is a positive unkindness, therefore, to allow them to grow up with slovenly habits, which will cause them to be regarded as ill-bred by persons of refinement, and which will be a source of discomfort to themselves. It is becoming much more common than formerly for men to have a knowledge of domestic affairs. Many men would feel it as much of a disgrace to live in the midst of dirt and disorder, when thrown upon their own resources, as a woman would under similar circumstances. It is not unusual to find cultured men who take pride in being competent to perform the ordinary duties of the household. A knowledge of these duties is most convenient to any man, for in every home emergencies come in which his own comfort, and that of others, will depend upon his ability to do the necessary things in the right way; but if such proficiency as this is too much to expect from every man, mothers should see to it, at least, that their sons, equally with their daughters, are taught to take that care of their rooms and personal belongings which the requirements of refined living demand.—New York Weekly.

Congressman's Trouble About a Share.

Congressman Mondell of Wyoming had an engagement with a theatrical party in Washington the other evening and at the last moment dashed out to get shaved. He found the barber shops closed and, having no razor of his own, borrowed one from a friend. He almost sliced his left ear off and now swears that at the next session of congress he will introduce a bill compelling barber shops to keep open all night.

BEGGAR'S BANK ACCOUNT.

Faithful Dog Earned \$25,000 for Its Master.

For the past ten years theater-goers and other pleasure seekers who walked on the Broadway of New York's Tenderloin after dark were wont to glance aside to the curbing at the attenuated harmonies of a hand-organ, says the New York Times. The glance showed them a ragged old man, grinding out the wheezy greeting of age to youth, but it also showed a grizzly-haired dog hard by, with a basket half full of coin in his mouth. The men who saw it merely grumbled: "Pshaw! Only a hand organ beggar. Probably worth more than I am." But their feminine companions were not to be put off in that wise. "But look at the faithful dog," they would cry. And the result was that the dog's basket became heavier every moment that he was on duty. It was the tribute of woman to the dog.

"Now, mind," the male escort would say, "I do it simply out of regard for the dog. Several days ago Broadway missed the dog. Broadway wondered and then speedily forgot all about it. The dog's home was in the tenement house, 462 West Thirty-eighth street, where a week ago he died. His master, since dead, the neighbors say, starved both himself and the dog to death. The dog is dead and the neighborhood knows not his name, but there is left to guard his memory a noble monument. The savings of the master that the dog earned amount to something over \$25,000.

Timothy McGrath was the dog's master. For years he lived in a small room in the tenement in Thirty-eighth street. Of late, since the death of the dog he himself had been ailing, and James Brown, a tailor, who had his shop on the ground floor, had been accustomed to do the meager shopping of McGrath.

Yesterday morning, as usual, Brown went up to the top floor, but could get no answer to his knockings. A policeman finally broke in the door. McGrath was dead. The ambulance surgeon said that lack of proper nourishment was the cause. In a tin box secreted in the room they found two bank notes, one on the Emigrants' Savings bank, and one on the Bank for Savings, showing to McGrath's credit \$15,000. There was also the deeds for a house on Fortieth street, off Fifth avenue, a life insurance policy, and deeds for a lot and monument in Calvary cemetery.

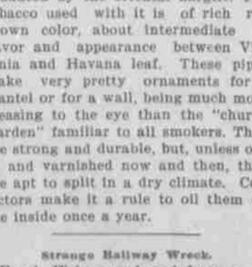
CURIOUS HONDURAS PIPES.

Spanish and Aztec Implements Retain Historic Designs and Color.

This country many of the odd implements and curios of those lands. The Spanish population has a large admixture of Aztec or other aboriginal blood, and preserves many of the implements as well as customs which prevailed in the time of the Montezumas. One of the queerest survivals in this regard is the long pipe which is still employed in the rural districts of both republics. It is made from a shrub or a sapling which grows somewhat like the elder. The bush is cut down and the pith extracted from the stem, which is afterward peeled, polished, dried and painted with primary colors in barbaric style. The simplest form is a straight stem from three to six feet in length. A more expensive kind is made from a stem with two terminal branches. This demands much more care in extracting the pith, and enables the owner to offer a friend a mouthpiece on one branch while he is enjoying another upon a second. Three-stemmed sticks are also made, and, very rarely, four-stemmed ones. These are kept as curios rather than as useful articles, and are supposed to have been employed upon special occasions in the days of the Incas. The bowl is of red mouthpiece may be of bone, or horn or decorated silver and amber. The length of the stem causes the tobacco smoke to cool appreciably in its passage from the bowl to the lips, and gives a taste almost as mild as that produced by the oriental nargile. The tobacco used with it is of rich red brown color, about intermediate in flavor and appearance between Virginia and Havana leaf. These pipes make very pretty ornaments for a mantel or for a wall, being much more pleasing to the eye than the "church warden" familiar to all smokers. They are strong and durable, but, unless oiled and varnished now and then, they are apt to split in a dry climate. Collectors make it a rule to oil them on the inside once a year.

Georgia Woman's Invention.

A woman inventor of Savannah, Ga., has obtained a patent on an electric



ELECTRIC SWEEPER.

carpet-sweeper and dust-gatherer, a view of which we present in the accompanying illustration. The machine comprises a pair of brush cylinders, rotated by connection with a fluted rubber roller in frictional contact with the floor, and there is also an electric motor inside the casing, which is utilized to run a rapidly revolving fan, which takes up the dust and drives it against a sponge. The latter, being saturated with water, readily retains the dust and aids greatly in cleaning the room. The current for the motor in the case of the hand-operated sweeper is supplied by a small generator connected with the fluted roller, but in case of a large sweeper, for use in halls and churches, it is intended to attach the sweeper directly to an electric-light circuit by means of wires. In this case the current is also made to revolve the brushes, and it is then only necessary for the operator to draw the machine along the floor, the speed of the brushes being so high that a rapid gait

SCIENCE AND PROGRESS



FALSE CROUP.

This is a form of laryngitis, occurring in young children, which is accompanied by a spasmodic drawing together of the vocal cords, occasioning more or less difficulty in breathing. It is usually called simply croup, but it is usually called simply croup, by both mothers and doctors, but is a much less serious affection than true croup. True croup is an inflammation, usually diphtheritic, with a membranous exudation filling up the larynx, whereas false croup is spasmodic and of short duration. False croup may begin suddenly and without warning, but usually the child has a cold for a day or two before the croupy symptoms appear. The attack comes on during sleep, and the little patient is awakened by the urgent need for breath. Sometimes there is difficulty only in inspiration; in other cases an effort is required to force the air out as well as to draw it in.

Accompanying the difficulty in breathing is a short, ineffectual cough of a harsh, metallic character. There is usually more or less fever, sometimes a very high one, and the pulse is rapid and hard. The child seems to be in imminent danger of suffocation—and sometimes actually is—but generally the spasm of the larynx relaxes after a while and the child falls asleep. In many cases the attack, if it has been severe, terminates with a fit of vomiting or the coughing up of a large quantity of mucus.

A second attack may occur the same night or the next night, or there may be no subsequent seizures.

The following morning the child is generally in his usual health, except for a slight hoarseness and a spasmodic, metallic cough, or there may be a little difficulty in breathing for a day or two.

Although the symptoms of a sharp attack of spasmodic croup are often terrifying, it seldom ends fatally in a previously healthy child. Convulsions or unconsciousness may follow a severe attack in a delicate child.

Relief may be obtained by applying to the throat a cloth wrung out of hot water. The inhalation of steam rising from a vessel of hot water in which a teaspoonful of compound tincture of benzoin has been dropped will sometimes break up a spasm. In severe cases the child may be made to vomit by giving him warm salt water, or by tickling the back of the throat with a feather.

It is not always easy to distinguish between true and false croup, and it is safer to call a physician in every case.

LOCOMOTIVES AND CHARACTER.

A well-known critic of art in France, M. Arsene Alexandre, studied the exhibit of railway locomotives at Paris last summer from a new point of view, and drew some interesting conclusions. One of his most surprising inferences was that the genuine art of to-day was exhibited not in the museum of paintings, but among the locomotives. The latter showed beauty of line and proportion and true originality of treatment. National character was clearly marked in them. The American locomotive combined elegance, practicality, convenience and power, betokening a race which takes its ease in working. The English locomotive was more trim, snug and smaller, but without loss of power. The French was lighter and finer in line, but less powerful and effective. The other nations showed similar distinctions in their work.

RESISTANCE OF BACTERIA TO HEAT

Many persons have erroneous notions as to the ease with which bacteria are destroyed by heat. In fact, the "thermal death-point" for bacterial organisms varies widely. Some forms of water bacteria are killed by simple blood-heat, while pathogenic bacteria develop best at that temperature. During their multiplying and vegetating phase of life bacteria are more easily destroyed by heat than they are after passing to the resting or spore stage. Some spores derived from the soil require boiling for sixteen hours to ensure their death. Moist heat in the form of steam is the most effectual disinfectant. No spore, however resistant, remains alive after one minute's exposure to steam at 140 degrees centigrade. But no degree of cold has been found sufficient to destroy bacterial life.

Freckles Indicate Consumption.

Is a freckled face indicative of consumption? It has been suspected, remarks a medical journal, that a remarkable proneness to freckles is often coincident with tendency to scrofula or tuberculosis. It is most certain that such proneness is associated with the temperament of the individual as shown by color of eyes and hair. Freckles are, as a rule, conspicuous only in the clear skins of children and young persons. In adults they either are not often present or are comparatively inconspicuous. An observation of some interest has, however, recently been made that they are liable to return in senile periods and to assume infective characters.

Rubber, spun glass, steel and ivory are the most elastic substances.

can be maintained without slighting the work. When the sponge has become coated with the dust the cover of the sweeper is lifted and the sponge taken out for cleansing.

LABOR SAVING UTENSIL.

The accompanying picture shows a newly patented machine, which may be of use in kitchens where a saving of time is an item to be considered. It does away with the necessity for beating eggs, cake, dough, etc., with the hands, employing in lieu thereof a foot-power machine, which is provided with a flexible whipper-carrying shaft, by means of which the agitation of eggs and other ingredients of a cake may be properly effected. There is also a dish-supporting shelf, so mounted that it may be used to adjust a dish at any desired angle. The machine is somewhat like a sewing machine in construction, and, in fact, if the upper portion of a sewing machine were cut away to expose the rotary shaft for connection with a flexible shaft and beater it would answer precisely the same purpose as the inventor's model. All that is required to



CAKE-BEATING MACHINE.

operate the apparatus is to attach the beater to the end of the shaft, insert it in the basin of liquid and run the treadle with the feet. The accompanying cabinet of drawers should also provide itself a great convenience to the housekeeper.

TELEPHONING ACROSS THE OCEAN.

One of the most remarkable inventions marking the opening of the twentieth century is the method devised by Prof. Michael I. Pupin, of Columbia university for sending telephonic messages through ocean cables. The chief reason why telephoning through submarine cables has not heretofore been successful is because electricity is retarded in passing through them. The retardation is variable, and its effect upon a telephonic message sent through a cable is to produce a jumble of the sounds which renders them unintelligible. Professor Pupin's invention consists in attaching to the cable, at intervals of about an eighth of a mile, little coils of wire, which have the effect of preventing the retardation of the current. It is believed that an Atlantic cable can now be constructed which will render conversation possible between the opposite shores of the ocean.

SCIENTIFIC JOTTINGS.

Attack on the South Pole.

The present year will see the starting of at least three expeditions, representing three different nations, in an attempt to solve some of the mysteries of the south polar regions. One will sail from Germany, another from England, and a third from Sweden. The Swedish expedition is the latest to be organized, but it has been undertaken with enthusiasm, and King Oscar will personally give it financial aid.

Electric Sweeper.

A view of which we present in the accompanying illustration. The machine comprises a pair of brush cylinders, rotated by connection with a fluted rubber roller in frictional contact with the floor, and there is also an electric motor inside the casing, which is utilized to run a rapidly revolving fan, which takes up the dust and drives it against a sponge. The latter, being saturated with water, readily retains the dust and aids greatly in cleaning the room. The current for the motor in the case of the hand-operated sweeper is supplied by a small generator connected with the fluted roller, but in case of a large sweeper, for use in halls and churches, it is intended to attach the sweeper directly to an electric-light circuit by means of wires. In this case the current is also made to revolve the brushes, and it is then only necessary for the operator to draw the machine along the floor, the speed of the brushes being so high that a rapid gait