

USING WATER TO BUILD DAMS.

California Are Now Reversing the Hydraulic Process Used in Mining.

The United States geological survey has been studying methods of building dams cheaply, with a view to promoting irrigation in arid regions. Its inquiries have led to an interesting revelation, says the New York Tribune.

Some of the old-time operations of the miners for placer gold and the use of the hydraulic "giant" have suggested an ingenious method of constructing dams for reservoirs in the west. The hydraulic giant was found to be a most effective and powerful agent in removing even compact bodies of earthen material. A stream of water brought from an elevation under great pressure and directed against the face of a hill in which gold was supposed to be, ate its way into the mass with tremendous force, cutting out large amounts of the material and washing them away, the waste water assorting the fine from the coarse particles. The sand and gravel thus washed away were carefully examined for the precious metal.

Of recent years hydraulic power has been employed to almost reverse this process. Engineers, appreciating the great transporting and assorting power of water used in this way, have learned themselves of it to build up instead of tear down the land, and by carefully guiding the material loosened by the force of the water they have been able to accumulate and arrange it almost at will. The process has been found especially useful in the construction of dams. For example, if an earth dam is to be built, the material rolled along by the water is carried in flumes to the elected spot. On leaving the flume small bowlders and coarse gravel are at once deposited. The sand flows on further, and the fine mud is carried in suspension for considerable distances. It is thus possible to deposit the gravel on the outer slope of the dam and the finer material in the center, thus making a central impervious clay wall and heavy coating of coarser gravel on the upper and lower faces of the dam. The material being deposited under water is thoroughly compacted, and there is less danger of settlement or of porous layers being formed than in the case of dirt placed by carts or scrapers. A number of dams, notably in Southern California and in Texas, have been built with extraordinary speed and small expense in this way, and even high railroad embankments have been constructed in like manner.

LIST OF FRENCH HEROES.

The Names Obtained of 10,000 Who Helped in the American Revolution.

Col. Charles Chaille-Lon, of Baltimore, who is known as an African explorer and who was connected with the special commission from this country to the recent Paris exposition, returned home recently on the French liner La Bretagne. After spending several days with friends at Philadelphia he will go on to Baltimore.

Col. Chaille-Lon has been abroad since 1897, and during the last year, under an appointment from Gen. Horace Porter, American ambassador to France, he has been overhauling the musty records of the war and navy departments of that country for the purpose of preparing lists of the officers, soldiers and sailors of that nation who fought for the independence of the American colonies. The names of over 10,000 of the French heroes for freedom have been listed, and the French government has promised to publish them in book form, with all the data regarding the battles in which the sea and land forces took part in the American revolution.

Gen. Porter is the president of the Society of the Sons of the American Revolution in France. Col. Chaille-Lon was made register to a commission composed of Henri Merou, French consul at Chicago; Mr. McLean, deputy United States consul general at Paris, and Maj. Huntington, U. S. A., which had the work in charge. The French war and navy department being deeply interested in the search, appointed soldiers and ships' writers to assist Col. Chaille-Lon and his associates in the search of the old records. The work took more than a year.

Col. Chaille-Lon says that there is a feeling of reserve on the part of the people of France because of the idea that Americans are forgetting the help which France gave to Washington in the war for freedom, but that it is to be hoped the friendship between the peoples of the two countries will be rekindled when the extent of the help which France gave to the early patriots becomes known by the publication of the records just copied by the commission.

The Least Known Land.

The least known land on earth, with the possible exception of Central Australia, is the great peninsula of Kamchatka, whose half million of square miles have a population of less than 7,000. A chain of very high mountains runs down its center, some of them being volcanoes, from whose mouths come smoke and cinders; the others are covered with a very thick growth of trees up to a height of 4,000 or 5,000 feet. Above the tree line live a sort of ibex, or mountain sheep, which are larger and stronger than any that exist elsewhere. The people of Kamchatka have bits of the skin of a few of these creatures and some of their large horns, but no European has as yet killed one.—Detroit Free Press.

WRITERS' MANUSCRIPT.

Legal Questions Which Enter Into the Relations of Editor and Contributor.

When the young literary peddler begins to hawk his wares round the magazines and periodicals, the first thing that troubles him is the difficulty of preserving his manuscripts. Nowadays nearly all the magazines print notices, stating the conditions on which they will receive unsolicited contributions, and all contributors are absolutely bound by such conditions. In the absence of such a notice, however, says the Albany Law Journal, there is no obligation on editors to preserve contributions that have been sent unasked, and when such contributions are lost, even through the carelessness of the recipients, the law does not hold them liable. Some years ago an action was brought against the late Augustus Harris to recover the manuscript of a play that had been sent uninvited to the great manager and had been mislaid. The judge held that, as the author had chosen voluntarily to send the play, no duty of any kind was cast on Sir Augustus with regard to it. This statement of the law probably went a little too far, but the result of the action would have been the same unless the author had been able to prove positively that the loss occurred through willful negligence as distinguished from mere carelessness.

It is not the practice in general of magazine editors to alter or curtail the contributions that have been accepted by them. If an article is worth accepting at all it is accepted as it stands, and if the editor sees that he could make use of it in any other form he suggests the changes and lets the author make them himself. But sometimes it is found necessary in editorial offices to touch up or tone down, to expand or curtail, articles that have already been accepted, and then the interesting question arises: How far is such a practice permissible? Robert Barr's story, "The Movable Man," first appeared as a serial in Tit-Bits under the title "At War with His Workers"—a title to which, it is said, the author of the story strongly objected. If he had been so minded, could he have restrained the publication of the story under any title but his own? When Mr. Kipling wrote "The Light That Failed" for an American firm of publishers, an objection was taken to the somber ending of the story, and the author was obliged to write a more cheerful conclusion to suit American tastes. Supposing, however, that he had refused to do so, would the publishers have been entitled to commission another writer to alter the story in the way desired? These questions belong to the limitless region of unsolved legal problems, but the rule of law, in so far as it exists, may be taken to be as follows: In the case of signed articles, any alteration, curtailment or addition which may have the effect of injuring the credit or literary reputation of the author is not permissible, and can be prevented. But when the name of the author does not appear, as in the case of newspaper leaders and the like, the right of the editor to use the blue pencil seems to be unlimited.

COAL GIVES WAY TO OIL.

Ocean Liners Are Being Fitted Out to Burn Liquid Fuel—its Advantages.

The experimental stage in the burning of petroleum as a fuel for ship furnaces has passed, and now liners are being fitted up with storage tanks and the requisite spraying apparatus.

Russia consumes no fewer than 7,000,000 tons yearly as fuel, and has with Italy and Germany largely adopted its use for naval purposes. In the Caspian sea steamers have burnt liquid fuel exclusively for many years, says the London Express.

In England the Great Eastern railway runs the fast Cromer service with marked success, and burns oil in specially constructed locomotives. The fuel is also used by the Metropolitan railway, and the reports of experts show that the life of the fire box of an engine burning oil is longer than that of a locomotive burning coal.

The China Mutual Navigation company, Limited, is fitting up three vessels with the requisite storage tanks and spraying apparatus, and one of the vessels of the Hamburg-American line is equipped for a series of trials, and the company has contracted with Sir Marcus Samuel's firm for a supply of the oil.

Mr. Benjamin Samuel pointed out to an Express representative the great advantages that are gained by ships using petroleum fuel. First, there is the saving of bunker room, and this space is available for cargo. One ton of oil gives as much power to a ship's engines as two tons of coal. A ship burning liquid fuel can be stoked by an automatic arrangement; it needs watching, however, but the hands in the stokehold are reduced to a quarter of the number employed in a vessel using coal.

Easily Explained.

"I wonder why the baby cries so much," said the young mother. "That's easy," answered the back-slash uncle. "Why is it?" demanded the mother. "Because it is a baby," replied the uncle.—Chicago Post.

The Cause.

Gladys—Your lip is chapped. Have you been "roughing it"? Ethel—No; but Jerrold has.—Judge.

CORPSE RISES AND LAUGHS.

Supposed Dead Man's Little Joke with Police and Doctors Leads Him in Jail.

Physicians and nurses, as well as two policemen, were given a surprise early the other morning at Chicago when a supposed corpse suddenly sat up and laughed. It was a climax to a serious affair and so bitter was the feeling over the "joke" played upon them that the two officers took the live "corpse" to the Desplaines street police station, where he gave the name of William McDonald, 717 West Taylor street.

McDonald was lying on an operating table at the county hospital apparently dead from the effects of having been struck by a street car. There was no sign of life in him and the attendants were discussing the circumstances when the supposed "corpse" suddenly broke into a laugh and sat up.

McDonald's hilarity was so great that he could not utter a word for nearly two minutes. He laughed and laughed until the tears rolled from his eyes. The attendants glared in surprise, while the blue coats seemed frightened.

McDonald was arraigned in the Desplaines street police court and pleaded that he had attempted a joke while under the influence of drink. Justice Eberhardt concluded that McDonald had been punished sufficiently and permitted him to go with a warning.

TRADES WIFE FOR MACHINE.

A New York Farmer Sells His Bride of One Short Year to His Brother.

Edward Chilton, of Herman, St. Lawrence county, N. Y., who was married less than a year ago to Mamie Cramer, has traded off his wife for an interest in a threshing machine and other chattels, with some cash to boot.

After the marriage Mr. and Mrs. Chilton lived in the village until this fall, when they moved on one of the farms owned by George Babbitt, Harry Chilton, a brother of the husband, went to work on the farm and worked until Tuesday. Then the brothers settled accounts. Harry paid Ed some money, and personal effects which could not be easily moved, such as an interest in a threshing machine and some wagons. In return for these Harry took Ed's wife.

The father of the two brothers carried Harry and his new wife to the train, and it is thought that they went to Vermont. The father said: "I never saw two brothers make a trade any more friendly and satisfactory to all parties."

Harbor Defense Gun Tested.

The test of the new pneumatic dynamite gun at Hilton Head, S. C., the other day under the auspices of a board of army officers is believed to have been satisfactory. It was shown the gun had a range of 6,000 yards. Eight projectiles loaded with explosive gelatin were fired. Six of them exploded upon impact and threw columns of water into the air. Two were fired with time fuses. If they were exploded it was at such a depth under water that there was not any disturbance discernible. Five dummies were fired to test speed. The government required that they should be discharged in 20 minutes. The time taken to fire them was 10½ minutes.

Artists Declare for Paris.

Edwin Abbey's advice to American art students to go to London rather than Paris was received with surprise by the American artists at Paris. A large number of artists and students were asked their opinion on the matter, and all stoutly maintained that Paris is superior in every respect. Many who have tried London say that, apart from purely artistic considerations, wealth and social position in London often count for more than talent. Besides, even the best English artists are notoriously bad draughtsmen. Paris, again, is cheaper, has better light and higher artistic standards.

Finds Cure for Lockjaw.

Dr. A. Leteue, of the pathological department of Mercy hospital at Pittsburg, has discovered what has every indication of being a successful serum treatment for tetanus or lockjaw. After a year of experimenting on lower animals the doctor tested his theory on three human subjects, a middle-aged man, a middle-aged woman and a boy ten years of age. According to his statement, these patients when first given the injections of the serum were violent, being in spasms and convulsions. The treatment soon quieted them and within five or six days they were restored to their former health.

Worth Looking At.

Mrs. Bradley Martin's preparation for the coronation indicates, says the Chicago Record-Herald, that she expects the people to quit looking at the king every little while and make remarks about her wonderful appearance.

Long and Loud.

John Long married Miss Belle Loud in Tennessee the other day. Well, remarks the Chicago Record-Herald, Long and Loud ought to be able to make themselves heard.

A Common Veil.

The director of the mint says the country needs more small coin. It isn't hard, says the Chicago Record-Herald, to find people who need other kinds also.

A SPINSTER'S FUNERAL.

An Unusual Burial Ceremony in Which Man Played No Part.

There has recently died at Vienna an aged spinster, Fraulein Marie Irrgang, whose especial pride through life was that she was a man-hater. She was loyal to her sex antagonism to the last and throughout her life gave no signs of wavering. In her will she directed that no man should be allowed to take part in her funeral procession.

An early disappointment in love is believed to have been the cause of Marie's hatred of the "mere man." She was a member of a society called the Jungfrauenverein, an association of old girls and young girls who had been converted to the anti-man views of Fraulein Irrgang. Though the fraulein decreed that no man should take part in her funeral procession, she could not prevent men from looking on and the streets through which the procession passed were thronged with men she so much detested, gazing curiously at the unique sight. The procession was composed of an immense throng of women of all ages and all social conditions and of deputies from every woman's society in Austria. But Marie's directions were not carried out to the letter after all, for the banner of the Jungfrauenverein was so heavy that no woman could be found who was strong enough to carry it. So it was borne aloft by one of the hated sex, who marched along, the only man in the procession.

Fraulein Irrgang, says the Detroit Free Press, had a rival in Fraulein Gretchen Marie Schultz, an old maiden lady of Berlin, who was known throughout Germany as "the man-hater." Having had an unfortunate love affair 50 years ago, she vowed that she never would speak to or if possible look upon a man again as long as she lived; and, being a woman of wealth, she was able to keep her vow until her death not long ago. She bought a retired house about a dozen miles from Berlin and equipped it from basement to garret with furnishings made by the hands of women, surrounded herself with a band of women each of whom took a similar vow of perpetual hatred of the opposite sex, and so skillfully were things managed that for 50 years the fraulein neither saw nor spoke to man or boy.

THE NEWSPAPER CRITIC.

He Has His Faults, Some of Which Appear to Be Constitutional.

The average critic of the newspaper does not own stock in any newspaper, and does not know the cost of getting the news. The chances are that he has never conscientiously met a reporter. Yet most of what he knows from reading outside of his own business or profession has been taught him by the newspapers, says the New York Sun. They show him every day that the world is not what he wants it to be, and it is hard for him to learn their lessons, and especially hard to make allowances for their faults. He may be lazy—they are industrious for him; he may be stupid—they are intelligent for him; he may be timid—they are bold for him; yet he damns the newspapers.

When a reporter, working day and night, throws the ardor of youth or the pity of age into the tragic scenes from court where everyone with a bright heart was in tears, he damns the newspapers. When an editorial—which he hunts for before breakfast in order to know what to think immediately after some momentous tragedy—is not exhaustive, he damns the newspapers. His especial condemnation is bestowed upon what he calls the vulgar publicity of the newspapers.

When he reads enough papers, or extends his reading beyond his newspapers and his business, or, better still, tries to prevent some injustice, he may learn that vulgar publicity is often a safeguard of justice. Good taste and the modest reserve of private life too often tempt the critic to shrink from an open fight with oppression. One of the arts of the leading criminals among politicians is to scare off the private citizen by warning him that evil communications corrupt good manners. But public spirit is much more robust and efficient when coupled with a familiar knowledge of the vulgar world.

A Movable Holiday.

The day on which Brazil annually celebrates republican principles has come to be a movable feast, dependent upon the popular sentiment toward the United States. July 14th, the day of the fall of the Bastille, was originally adopted as the official jubilee day, but the Brazilians incline more and more to shift the celebration to our own Fourth of July. This year, so friendly has Brazil felt toward this country, that the press, pulpits, government and popular enthusiasm combined to keep the Fourth. The stars and stripes with portraits of Washington and McKinley, were everywhere present, representatives of the government visited the United States ships in the harbors and the legations on land, military bands serenaded United States officials, and electric lights on government buildings outlined the arms of the United States and Brazil by side. More and more Pan-America is becoming a fact as well as a high-sounding title for exhibitions and congresses.—Youth's Companion.

Scandal That People Enjoy.

There is nothing that pleases nine-tenths of the people so much as a scandal affecting people who "put on"—Atchison Globe.

AUNT CINDY'S RECIPE.

The Old Cook Teaches a Girl Visitor How to Make Sweet Potato Pie.

A Washington girl was recently visiting in Lynchburg, Va., and while there was greatly impressed with the perfection of the sweet potato pies that old Aunt Cindy, the cook, used to send up for the delectation of the company. Such richness, such sweetness, such flakiness of crust, such delicate and delicious blending of flavors were never before attained by mortal hand. So, armed with pencil and notebook, in true cooking school style, and fortified by permission of her hostess, she ventured into the kitchen to learn the sweet secret.

"Come in, honey, come in, an' make yo'se'f welcome," said Aunt Cindy, affably, when her visitor modestly presented herself at the kitchen door. It is needless to say that Aunt Cindy was a relic of antebellum days, and valued accordingly.

"I want to get your recipe for sweet potato pies, auntie," seating herself on the chair Aunt Cindy had hospitably wiped with her apron. "Law, chile, I des cooks out o' my haid; I don't go by no writin'!" replied the old woman.

"Certainly, but your proportions must always be the same or your results would vary." The Washington girl was a cooking school graduate, with "one cup" of this, "two cups" of that and "three cups" of the other fresh in her mind. "Let's begin with the eggs," she continued, observing the old woman's puzzled face. "How many eggs do you use?"

"Well, yo' know how aigs is, honey," replied Aunt Cindy, judicially; "some's big an' some's little; sometimes dey's skeerer, an' sometimes dey ain't. I des puts in de aigs 'cordin' to de size ob 'em an' how many I 'e got."

"How many sweet potatoes do you use?" asked her questioner, somewhat bewildered. "Dat's 'cordin' to de size ob de family, ob co'se," said the old woman. "When we all got company, as we mos' in generally has, I uses mo', an' when dey ain't nobody but des we all, hit don't take so many."

"How much butter?" "Right smart o' butter," responded Aunt Cindy, emphatically, evidently thinking she was accurate at last. "Ain't nothin' good widout butter, an' I always puts in er plenty."

"How about sugar?" questioned the young woman. "Sugar to tas', honey; sugar to tas'." Some folks likes 'em sweeter'n others; we all likes ourn tolerble sweet."

"What else do you put in?" was asked before the book was closed in despair. "Oh, des whatever's handy," answered the old woman. "Sometimes I puts in er little cream, but yo' don't haf to do dat; des 'cordin' to wedder yo's got any er not; an' er pinch o' spice an' er few drops of pernilia an' er dash o' brandy, of Miss Jinnie's got any ecetera' around. De brandy's de bes', but dey ain't no spechul rule 'bout seasonin'."

"I am very much obliged to you, aunty," said the Washington girl, politely, if insincerely, as she gathered up her book and pencil and left the kitchen.

But Aunt Cindy was not to be deceived. "Pears like folks dese days can't understand nothin' yo' tells 'em," she remarked when the young woman was out of hearing. "Er de war, when I wuz er chile—" But as Aunt Cindy turned toward the stove, says the Washington Star, her reminiscences were lost in a cloud of fragrant steam that arose from a saucepan where "right smart o' butter" and "sugar to tas'" were bubbling in toothsome harmony.

Care of Hands in Cold Weather.

An extreme temperature, or either very hot or very cold water, is not good for the hands. Warm water is more cleansing than cold water. A dozen drops of the tincture of benzoin added to a basin of warm water is beneficial to the hands. Castile or one of the fine toilet soaps should be used. A generous lather should be made and the hands thoroughly rubbed with it. A rubber brush is a great comfort. A little bran or oatmeal if put in the water has a softening effect, and makes the skin velvety and pliable. Almond meal is also excellent for this purpose. Care in drying the hands is essential to their good condition, especially in winter. A soft towel will gather up all the moisture and should be used in between the fingers of each hand so that every part may be thoroughly dried. After drying the hands it is a good plan to rub in a little cold cream or almond oil, after which, if they are particularly sensitive, powder may be dusted over them.—Ladies' Home Journal.

Left-Over Fowl.

A delicious way to use cold left-over turkey or chicken, which may be pigeon-holed against the coming feast, is to mold the white meat with cranberry jelly. Put a layer of strained cranberry sauce in the bottom of a mold, and over this a layer of the meat finely chopped and seasoned. Add more cranberry and another layer of meat, alternating the two till the bowl is full. Put a weight on top and set away to chill and harden. When ready to serve turn out on a dish and garnish with celery tips.—N. Y. Post.

After the Dinner.

Hoel—Mr. Tenorwell, won't you favor us with a song? Tenorwell—Sorry, Mr. Shouter, but I never can sing after a hearty meal. I'm like a mosquito; I do my singing before eating.—Boston Transcript.

The Way Some Men Put It.

It is no disgrace for a man to be poor—if he doesn't owe any-thing.—Chicago Daily News.

DOGS ESCAPE DUTY.

Many Imported Into United States Under False Pedigrees.

Tariff is Thus Avoided, But a Serious Fraud is Perpetrated Upon the Public—Employe of English Kennel Club Responsible.

The United States consulate at London has been apprised of serious frauds on the New York customs officers in connection with the importation of dogs into the United States. All American dog fanciers are affected by these frauds, which have been carried on for a considerable period. The United States tariff law provides that all dogs having a pedigree of three generations, certified by the English Kennel club, are to be admitted free of duty. Recently an employe of the Kennel club having the preparation of these so-called "consular pedigrees" was absent through illness, and, it being necessary to open his desk, several fictitious pedigrees, made out on the consular forms, were found.

A committee of the Kennel club immediately began an investigation, which is still progressing. This committee says that for a long time back these false pedigrees have been furnished to American dog dealers by the employe in question, enabling these dealers not only to get large numbers of dogs through the New York custom house free by fraud, but also probably enabling them to sell dogs for fancy prices in America on the strength of these fictitious pedigrees, apparently duly certified by the Kennel club. It was discovered that one dealer alone, in one shipment, was able to defraud the United States customs of \$750.

The American dog dealers bought, say, 30 genuine pedigreed dogs of different breeds and 20 others without pedigrees. By collusion with the Kennel club employe they procured fictitious pedigrees for the 20, and so passed the whole lot duty free. The investigation has also disclosed other irregularities, and several employes of the Kennel club have been dismissed.

AN EDUCATIONAL TRUST.

Abram S. Hewitt Trying to Effect His Organization for the Benefit of the Public.

In explanation of his educational plans, outlined at the laying of the corner stone of the new high school of commerce at New York, Abram S. Hewitt made a statement, saying that he is "trying to organize an educational trust for the benefit of the public." In a recent letter he expressed the opinion that the city should defray the expense of putting up the buildings for the high school of commerce and a technical school, but that the institutions should be supported by private endowments and contributions.

"We already have the principle well established of a community of interest between public and private benefactions. The library illustrates this well. The commercial high school is an absolutely necessary adjunct to the education of the next generation," said Mr. Hewitt in an interview.

"The city is going to put up the building for it, and I am in a position to say with a good deal of positiveness that there is public spirit enough in this great mercantile city to provide ample endowment."

Libraries Don't Get It All.

That Andrew Carnegie takes an interest in other enterprises of a philanthropic nature than libraries and universities was indicated when Dr. E. R. L. Gould, of the City and Suburban Home company, at the dinner of the Reform club, held at the club house, in a speech said that a little over a year ago Mr. Carnegie, after investigating the plans of the company, had subscribed \$100,000. Mr. Gould said: "Mr. Carnegie is not interested in founding libraries only. A little more than a year ago I wrote to Mr. Carnegie and told him what we were doing. The next day I received a letter from him asking two or three questions. I replied to these, and the next morning received a subscription of \$100,000."

England's Anthem Revised.

The national anthem of England is now undergoing revision in order to make it accord with the new monarchy. As at present sung it reads: "God save our gracious king." This, apparently, is not imperialistic enough for the present court, besides which the word "gracious" is held to be more applicable to a queen than a king. So at the coronation the refrain will be changed to "God save our lord, the king," which, by the way, was used in the earliest extant copies of the anthem, dated 1743.

Why It Didn't Pan Out.

It seems that the Pan-American congress didn't pan out, owing to the fact that each of the parties to it wanted the other follows to make all the concessions. The delegates, remarks the Chicago Record-Herald, must have insisted on discussing things first and having the champagne brought in afterward.

Cash for Deserving Poets.

M. Sully-Prudhomme announces that he will devote his \$40,000 of the Nobel prize to help deserving poets publish their works.

England's Horticultural Show.

Shrewsbury, England, with a population of but 30,000, boasts one of the largest horticultural shows in the world.