

SAVING WATER FOR IRRIGATION.

DAMMING THE AMERICAN RIVER—
AN ARTIFICIAL LAKE—THE EAR-
RIER SYSTEM.

Eds. Record-Union: From an experience of twenty-five years in California as miner and ditch operator, the writer ventures to give to the public such facts as have come under his observation having a bearing on the subject of irrigation. From an article published in the *Placer Herald* of some months ago, a brief outline of a plan designed to supply many of the wants, and successfully encounter many of the difficulties of the State will be reproduced in this writing. The fact is assumed without argument, that irrigation, navigation, leveeing and the suppression of that great and growing evil, hydraulic debris, are, one and all, to be controlled by the same agencies, and brought into use by the same means. In order that this may be apparent, a brief sketch of the proposed scheme is given. It is assumed that the construction of a barrier in the cañon of the American river to the height of 800 or 1,000 feet at a suitable point above Folsom would not in the least operate as an injury to any hydraulic mining of which this river is an outlet. All objections being removed, the practicability and use of such works is respectfully presented for the deliberate consideration and action of the public. It is a well known fact among miners that the strongest and most durable dam that can be built is that which is constructed of trees and brush with all the interstitial spaces filled with sand, gravel and sediment deposited by the water from the mines, which is heavily charged with a solution and mixture of these materials, the trees and brush being placed in the same order as shingling a roof. Say a proper base is prepared for this purpose, extending up and down the stream 300 feet. A stratum of trees in the order described is placed. In a short time this entire stratum is a solid mass of water-tight, compact masonry. A continuous repetition of this process, varied only by working to a design, will complete to any required height within the compass of the cañon the proposed barrier. A side chute for the permanent occupation of the river, it is easy to conceive, may be commenced and finished with the barrier, whose use and purpose will be for a waste away for safety. Considering a sufficiently clear idea of the design to be understood, an examination of some of its claims is presented. The first effect of such a structure will be the permanent stoppage of the waste material from the mines; the next will be that the water will be sufficiently filtered so as to be clear and pure in appearance, but not really so. From this point to the ocean it bears no menace with it. This much being accomplished, it requires but little engineering knowledge to understand that an excellent site for an artificial lake has thus been formed of from eight to ten miles in length and from two to two and a half miles in width. Now supply this lake with proper waste ways and outlets for safety and distribution, and repeat them in every mining river in the State until they can be counted by the hundred, then is it a shock to public credulity to assert that the storms of winter may be gathered and controlled so as to be of immense benefit in preventing the calamities of inundation? And what is more, can agriculture depend upon any system for its supply of water which does not embrace the idea of gathering the storms of winter for its use? Mining experiments have fully demonstrated the great poverty of any plan of ditching which does not also carry with it large reservoirs. For the benefits of navigation this plan is confidently given. Who will say that the expedient of wing damming in order to open a stream up to navigation is in any respect equal to it? It is too much to claim that the system of leveeing to reclaim overflowed lands may not receive vast benefits from it.

If, then, the barrier system will accomplish one-half of what is claimed for it, then nothing but its practicability and cost should interfere in having them. The writer not only believes the plan to be practicable, but the cheapest and best to meet the wants of the coun-

try to be found. A system of this kind when entered upon will give employment to many useful immigrants who are coming among us, and will be of vast importance in gathering immense quantities of water, in settling feuds and difficulties which are certain to spring from a scarcity, and which also will bring the State to its full agricultural status in the shortest time, and will also avert many calamities by insuring pure, instead of foul water.

G. B.
—*Sacramento Record-Union.*

AN EXTRAORDINARY KIND OF SEA-SICKNESS.—The following experience of Capt. R. C. Coleman, of the American rifle team, was obtained from a member of his family, and of course is authentic. The captain, soon after getting out of sight of land, was attacked with a peculiar kind of sea sickness, which is very rare, it affecting not more than one in a hundred passengers. Instead of developing in the ordinary form of terrible nausea, it affects the brain, producing delirium and all the symptoms of brain fever. If the patient remains in this condition until he reaches land, or even feels a land breeze, he may recover, but a recovery from this disease under other circumstances than those mentioned, that is, while on board the ship away from land, is sure to be followed by ship-fever, which is certain and almost immediate death. The fever and delirium lasted during the entire passage over, and his comrades were almost certain that he would be too much unstrung to shoot in the team. He recovered rapidly, however, on reaching land, and his practice soon proved that his ability to hit the bull's-eye was not impaired. The captain was informed by the ship physician and other high medical authorities that he had had a narrow escape from death, and that he ought not to cross the ocean again. Under such circumstances he very naturally dreaded the return voyage, but it had to be attempted at any risk. Soon after starting on his return he was attacked the same as before, though even more severely. He remained delirious the whole time, however, until the vessel reached Sandy Hook, and escaped ship fever. It was a severe experience, but considering the fact that but few affected as he was survive a second ocean passage, he feels that he was very fortunate. Though he returns covered with honors, it would take greater inducements than the victories of Dollymount or Wimbledon to tempt him to cross old ocean again.—*Middletown (N.Y.) Press.*

VALUABLE IF TRUE.—A writer in the *St. Louis Globe-Democrat* is enthusiastic over the discovery that a variety of the smart weed which grows wild in Missouri in such profusion as to be a nuisance, surpasses bark in its tanning qualities. As its only cost is that resulting from the labor of cutting and stacking it, say \$5 a ton, while bark costs in that State \$112 per ton, it is argued that hereafter millions of hides will annually be made into leather in the West instead of being sent to the Eastern States to be tanned, which involves the expense of transportation both ways for the leather consumed in the West, besides paying the Eastern capitalists and merchants for work which could just as well be done at home. It is said that this plant yields at least 10 per cent. of tannic acid—an analysis by the Nebraska State chemist gives nearly 22 per cent. from the root and 17 to 19 per cent. from the plant, hemlock and oak bark yielding from 11 to 13 per cent. But even if the result stated by the Nebraska chemist is correct, it does not follow that this weed will make as good leather as bark. There are peculiar properties for making good leather found in bark that, so far as generally known, have never been equalled in any other material. More or less tannic acid is found in almost every plant that grows, and in some the percentage of tannin is as high as from 44 to 50 per cent. Yet the leather produced by the use of these plants has never come into favor, and that made from some of them is not only bad in color and defective in other respects, but is liable to return to a condition very like that of raw hide, which is not the case with bark-tanned leather. The *Globe-Democrat* correspondent says, however, that actual experiment has shown that leather of better quality

than bark-tanned leather can be made with this weed in fifteen days less time; and that one ton of the plant will tan 400 pounds of leather, while the same weight of bark will produce but 175 pounds.—*Et.*

That Valcour Island fire-love community property was sold the other day under a foreclosure of mortgage.

DIED.

At East Canyon, October 14th, 1875, after an illness of twenty days, MINNIE ANN, daughter of Roddin A. and Julia A. Alfred, aged 10 years and 9 months.

In the 20th Ward, of this city, October 19th, of typhoid fever, HELEN MARIA, wife of Joseph Todd, and daughter of George and Emily Bunn. Deceased was born in Birmingham, England, March 18th 1852, and leaves a husband and three children.

Millennial Star, please copy.

At Big Cottonwood, Salt Lake county, October 19th, of diphtheria, HOSEA, son of Hosea, Jr., and Elizabeth Stout, aged three years, seven months and fourteen days.

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SALT LAKE CITY,
13th Sept. 1875.

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This is to certify that I have appointed Bishop Elijah F. Sheets as my agent to collect and disburse all moneys donated towards defraying the expense of the publication of the Book of Mormon in the Spanish Language.

DANIEL W. JONES.

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TO JOHN HUTCHINS.

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H. D. CONVERSE.
CALVIN KIRK.
I. I. GREENEWALD.

Ophir Mining District,
Salt Lake City, 1875.

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