

There are many good claims and river leases lying undeveloped for want of capital and for want of knowledge of how to produce certainty of results. If the results can be assured with reasonable certainty, capital will not be slow to embrace the opportunity. Many costly experiments have been made, some of which have been total failures, some partial failures and some successes. Capitalists, naturally and wisely, are reluctant to put money into schemes that may result in similar failure. An intelligent examination of these cases shows that in every instance failure has been due to some evident cause.

Some of these causes are the following:—

1st, the adoption of the wrong type

eral arrangement or detail, so that it fails in point of insufficient capacity, frequent breakdowns, inability to dispose of tailings, inability to clean "bed rock," inability to save the gold, and excessive cost of operation in proportion to work done; 4th, poor management; 5th, not enough gold in ground to pay; 6th, organisation by a "promoter" for stock jobbing purposes; 7th, operation by an "inventor" who has a new machine, and can do what no one else has ever done; 8th, lack of capital to efficiently carry on the enterprise; 9th, ground not suitable for dredging; and, 10th, character of gold such that it cannot be commercially saved.

"Forewarned is forearmed," and to avoid these and other rocks and shoals



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of dredge, such as suction, clamshell, and other unsuitable types, which, for specific reasons, cannot be made a success for dredging gold; 2d, erroneous diagnosis of the conditions to be fulfilled as to the character of material and method of working, and the consequent lack of adaptability of the machine to those conditions; 3d, faulty design of the machinery, either in gen-

it is necessary to have a knowledge of them. It is practically impossible for any one but an expert to determine all the points that must be covered from a mechanical, commercial and legal point of view; but enough has been said to indicate the general character of this new industry and the lines on which it can be successfully carried on.