

CHEAP AND EFFECTIVE ORE REDUCTION.

Perhaps in no other industry is there so much waste and expense as in that of reducing ores and extracting from them the more precious ingredients. Devise as we may, there is always a certain percentage of the desired articles that clings tenaciously to their long-time associates and cannot be separated therefrom; this circumstance, in connection with the expense, has made the milling or smelting of low-grade ores below a certain limit out of the question, and thus a large quantity of treasure in a widely diffused state is altogether undisturbed. The amount of such uncovered wealth in Utah Territory is of course only a conjecture; but that it amounts to enough to square off what is left of the national debt—something over a billion—there would seem to be no doubt. Under such circumstances inventive skill has been put to and kept on a strain to devise some means of at once increasing the percentage of metals extracted and making the process cheaper, and that we are destined to reach this great desideratum and at a not very distant day, is well assured.

A new process has been recently patented by Mr. Gervase Brown of this city, and it is now in operation at the Coulkin Smelting works. Dry ores from Utah, Idaho and Nevada have been tested by this process by J. C. Garvin, Esq., of Leadville, Colorado, a gentleman of many years experience in the reduction of ores carrying the precious metals. There have been several working tests made under this process of different grades of sulphide ores, carrying both gold and silver, which were roasted, after pulverizing, from five to twenty minutes, and the result showed a saving, after leaching, of 99 per cent of the assay value. In one test made in the mill at the Coulkin Smelting works, the ore was put through a twenty mesh screen and roasted for five minutes, after which it was put in the leaching tank for eight hours, and the result showed a saving of 99 per cent of the silver and 90 per cent of the gold. Another test of sulphide ore carrying 50 per cent of iron and copper pyrites, \$36 in gold and 18 ounces in silver, was roasted twenty minutes, in the leaching tank ten hours, and there was nothing but a trace of either gold or silver left in the tailings. These tests were made under more unfavorable circumstances than would exist in the treatment of large quantities in a properly constructed mill with steam to heat the solution and hold it at a proper temperature, which is very essential to obtain the best results. The Gervase Brown process, it has been demonstrated, will treat quickly and successfully all dry gold, silver and copper ores. The copper is of out pure by itself, and the gold, silver and lead are got out together and run into bullion, some of which has run from \$2800 to \$3000 per ton. This process simply reduces any kind of ore into bullion at a cost of \$1.50 per ton, unless the ore carries pyrites of iron, in which case there is incurred an additional cost of fifty cents per ton. The bullion produced is fine, and when the

gold, silver and lead are separated, it runs, as already stated, from \$2800 to \$3000 per ton. The cost of a 100 ton plant is about \$5000. If the ore is very rebellious and has to be roasted, the roaster will cost about \$800 additional.

An interview with the inventor in this city was the means of ratifying the foregoing, who is not only willing to explain the workings of the new process but to show its mechanism and results. It would seem to point to something of a revolution in our processes of reduction, and thus be the means of bringing any number of mini-g properties at present obscure and unworked prominently and profitably before the public. Papers devoted exclusively to mining and its concomitants speak in the highest terms of the invention, and it would seem as if by this and other means a new condition of things was upon us. Now let some one invent a cheaper, more thorough, more rapid and less dangerous method of extracting ores from the bowels of the earth—to which complexion we may come at last—an end to the wealth of this favored land could not be measured.

SCARED AT A SELF-RAISED SPOOK.

A dispatch from Washington last Saturday night, alluding to some alleged anxiety on the part of Dr. Geo. L. Miller, formerly editor of the Omaha Herald, to bring out the admission of Utah as a state, has the usual effect in this city of throwing the editor of the Tribune into many kinds of convulsions, and causing him to indulge in maudlin asseverations that the genial doctor is "a Mormon attorney," if not "in fact a member of the Church of Jesus Christ of Latter-day Saints." Of course the Tribune does not believe its own words in either instance; for it knows that "Mormon attorneys" are not employed to press statehood, and that "Mormons" with glad unanimity are content to let the whole matter rest until "non-Mormons" are ready to press it. Our own opinion is and the evidence fully justifies it, that the editor of the Liberal organ kicks up all this fuss about imminent statehood or the sole purpose of hastening it as much as possible; it gives him a constant topic upon which to comment and is the last refuge for his particular sort of criticism. It must be in the highest degree painful to his friends, as it is certainly pitiful to the rest of the community, to see an otherwise bright mind thus resolutely bent on disclosing its own decrepitude.

AN ERRONEOUS IMPRESSION CORRECTED.

Because of the Milesian immigration to the United States being so much greater than to any other part of the world, perhaps greater than to all other parts, we have the inevitable exaggeration obtaining widespread credulity that our greater eastern cities are fairly overrun with Irish, who either dominate or dictate in everything political and many things religious and social. In New York City particularly the

current tradition informs us that at least nine out of ten policemen are Irishmen; that they are made such after having been upon the sofa ridiculously short time; that they hold a large number of other and more profitable public positions; that they are all Democrats because of a natural instinct to be "ferminat the government," and so on. This is a most fruitful theme for the politician, the romancer and the playwright, the last named particularly. What kind of a play would it be that didn't have a Hibernian in it in one or another capacity, but preferably as a policeman with red whiskers and a mouth like the entrance to the Mammoth Cave? It is all a pleasant (but in some cases a malicious) fiction, though.

The New York Sun calls attention to the fact that an old tradition has been overturned in the police department of that town by promoting to a captaincy a policeman whose Christian name is Patrick. It appears that in all the years that the department has been in existence that famous cognomen has never appeared in the list of police precinct commanders in New York. It might also be as well to add to this morceau the information that New York's "finest" contains a decided minority of Irishmen, and that there are several prominent Irish citizens of that and other places who are not only Republicans but thorough-going and uncompromising ones. Patrick Ford, editor of the Irish World, is one of these; Patrick Egan, known to both fortune and fame as our minister to Chili, is another; General Connor, who died here a year ago nearly, was one, and they are really quite numerous. We don't expect that an idea as thoroughly engrafted upon our prejudices as the one named will cease or even be abated to some extent because of this exposition; but for the sake of having things right and undeceiving those who have all along believed what they heard on that subject, it is proper that it be made nevertheless.

THE WORD BAYOU.

Prof. George Hepp, a member of the editing committee of the Dialect society and in charge of the department of English philology in the Ann Arbor (Mich.) university, sends the News a communication which we append entire. The matter, he says, is one of historical interest, inasmuch as the word is supposed to be in use only in that part of our country which once constituted "New France," whereas it is found here and there all over the country. The letter is otherwise self-explanatory:

Dear Sir—I write to enlist the assistance of your readers in determining the geographical distribution of the word "bayou." I do not refer to the use of the word in literature or to anyone's knowledge of the word if derived from that source; but I desire reports from those of your readers who know some piece of water or of land that is locally called a "bayou." The best results will be obtained from direct answers to the following questions:

1. Where (at or near what town and in what state) is the bayou?
2. Describe what it is.
3. Is the word applied to one bayou,