

ought many good stockholders.

The enthusiastic stamp mill which we've specimens." He sends one of the stamps commence over the amalgamating table and smoothly, of the—success. the battery, the manager's face? The tailings are; the inclination more water is passed, the ore is fine, the tailings are poorer, and satisfaction that its disgrace.

at so many mills is not forthcoming? It is as a grinder.

It is expected that stunted ores, may be mechanically combined with the ore-producing or not ore. But all upon the ultimate result, and if they are not. It would be light or heavy would be always great difference in the results, if we had a stamp mill at I consider the stamps in use in our

mills, under no circumstances favorable to our ores. The slimes pass too, unobstructed, and from the narrowness of the plates in too deep a current over them. The chloritic and especially talcous slimes flow too close and compact over the table and hinder the fine, often floating, gold particles from coming in contact with the quicksilver.

Similarly act heavily mineralized slimes, and when they are in connection with the former muddy slimes there is no preventing loss, unless you increase the plate area of your amalgamating tables in width considerably, and thin out thereby the current of ore particles and give the table the right inclination. Or if you do not like to increase the space of your building, and to increase the work of the gathering of the amalgam, connect hydraulic classifiers directly with the stamps, get rid thereby of the muddy slimes, and acidulous water, so injurious to a successful amalgamation, and change from the Spitzluten your amalgamating tables, and from them to the vanners. But you need in both cases slime tables, or as they have in California, blankets for arresting the fine metallic minerals, which go with the slimes from the classifiers, and those from the vanners which receive the finest graded product from the Spitzluten. Because, if you have not these, you might lose as much and sometimes more on auriferous minerals than you have saved in free gold on your amalgamators.

Now I have exemplified only one case and the difficulties which will arise therefrom, but as long as we do not throw the stamp among the old iron, so long have we to put up with it, and have to counteract its defects by applying suitable apparatus in connection with it. I repeat here, I do not consider either our amalgamating table, or the Frue vanner or its relatives, the right apparatus for our mills. The latter might do where the ore carries only one metallic mineral, and if fed with "classified products," but where the components of an ore are many, and of varying specific gravity as is usually the case here, and we wish to separate them, then they are not economic machines, because we receive all the different minerals mixed together in one product. And further, where coarse grinding—30 meshes and under—has to be done to avoid the production of too much fine slimes, a large amount of coarse mineral particles are carried off with the tailings. And again, where fine grinding—40 meshes and over—has to be resorted to with the presence of such slime-producing rocks as ours, a large portion of the fine metallic minerals go with