

effectiveness ; as for instance the blanket process in the California mills. But what are the reasons of this pious retaining of an old, wasteful practice? Many—some of which would often invite severe criticisms, but I shall abstain from detailing them here. Enough that they exist not for the good of our industry. We always should be on the *qui vive* for that from which we could derive an intellectual or material benefit. The Australians are ahead of us in this respect. Some time ago the Government of Victoria appointed a commission for looking into the wasteful operation of the numerous dressing works in that country. This commission has handed in its report, and recommends very urgently the adoption of the so-called "Luhrig system," which these men studied on the European continent, as well as in their own country, in the works at Stawell, in the North German mine at Waldon, and Long Tunnel mine at Walhalla, which they considered "to offer object lessons of the highest value."

Now, gentlemen, I think it is high time that we experience also such "object lessons," and if it were merely for keeping up with the times, not to consider at present the economical advantage derived therefrom. I said above that our ore dressing has not kept pace with the improvements and innovations in the other branches of our mineral industry, and if our inventive genius is not strong enough to think out something with which we can improve these poor conditions in our works, then we should not hesitate to put aside for a while our "American pride," and look into the works of other nations to see if we can detect anything there that might lead to better results and to greater personal satisfaction. I cannot imagine myself in the place of a manager of any works, who does not care for a moment how high the tailings of his mill will go, who is simply satisfied with the result he is gaining, as long as the stockholders do not complain.

The waste in our mills is not justifiable ; such working is crude and unscientific, and does not harmonize with the progress of our present age.

I have tried, gentlemen, to show you here with a hastily drawn plan the same system which the Australian commissioners recommended so urgently to their Government and mining world for adoption. It is known under different names : the "Luhrig," from the well-known milling engineer, D. Luhrig, in Dresden ; or the "Bilharz," from the not less well known Government mining director, O. Bilharz, in Freiberg, or the

"Krupp" system, introduced to

I show a that they might with them. I say a few words present milling and the separation of this country

We all know the metamorphic so called Keeweenaw and hornblend stringers and which after mill ate sufficiently stone, which is and galena, sell is mostly fine mechanically o position with t copper and iron

The percentage often to over 50

Now, in b we have to con most complete, economic mine later metallurgi an important f chlorination, cy more advantage

We should ditions, and no considerations c occurrences on practice is to o