

past reductions. As well might a merchant pay a high figure for an empty store simply because in days gone by it had done a good business. Let the mine owner consider these matters. Let him be truthful of what he has to sell, for the investor will take accurate account of stock, and if his shelves are not empty and his price is in keeping with what he has to sell, he may dispose of his property.

Float.

A good deal of guessing and disputing has always arisen between prospectors, over the percentage of metal contained in the ore of any new find, whether a galena or copper strike, until such time as assays have determined the facts. As all ores, whether galena, copper or iron, can contain only a certain percentage of metal, it is well for the prospector to know just what is the highest percentage of metal possible, and thus give him something to base his calculations upon. We submit the following figures taken from the *Miner and Electrician* of Spokane:

Magnetite (magnetic iron)	Iron 72.
Hematite (red oxide of iron)	„ 70
Iron pyrites	„ 46.6
Cuprite (red oxide of copper)	Copper 88.8
Malachite (green carbonate)	„ 57.4
Azurite (blue carbonate)	„ 55.2
Chalcopyrite (copper pyrites)	„ 34.6
Galena (lead sulphide)	„ 86.6
Zinc blend (zinc sulphide)	„ 67.

An unusual method of discovering a goldfield is related by the Hon. E. H. Wittensohn, Agent-General for Western Australia. In 1883 the

Mallinafield was discovered by a lad who, in picking up a stone to throw at a crow, observed a speck of gold in it, and reported it to the nearest resident magistrate. This gentleman was so excited at the news that he telegraphed to the then Governor, and stated that a lad picked up a stone to throw at a crow, but in his excitement omitted to say "and saw gold in it." So the Governor wired back these words: "What happened to the crow?"

Recent experiments with Canadian feldspar, by a prominent china manufacturer, have proved very satisfactory, and may result in a large export trade if cheap enough transportation can be obtained.

All of the Governments have fallen back upon copper, or compositions in which copper is the predominant metal, for sheathing their warships. Electroplating the bottoms of ships with copper has recently been experimented extensively with, and this does away with many of the old objections to copper sheathing. Where the copper plates were nailed on the ships, "pitting" nearly always started at the nail-holes. If the salt water was allowed to enter here, even in the smallest quantity, corrosion would begin at once, and in a short time do great damage to the steel hull. In electroplating, however, the copper sheathing is put on in one unbroken mass and there is no danger from "pitting". When the whole surface has been electroplated with copper a smooth and unbroken surface is presented, and it fits so closely that the sheathing cannot be removed without sometimes clipping off the iron.