5 : 1, is granulated, extracted with hot water until the glassy character disappears and recrushed to a material of about a 2 mm. mesh.

Tin from Waste Tinned Metal. G. von der Linde, Nov. 3, 1914. U. S. Pat. 1,116,176. The scrap to be detinned is sub-

jected in a closed chamber, (a) to a uniform mixture of air and chlorine produced by diffusion in an adjacent chamber, (d).

Fireproofing Materials. W. C. Zeller, Nov. 3, 1914. U. S. Pat. 1,116,349. The composition consists of a solution of ammonium sulfate, ammonium phosphate, sodium phosphate and borax.

Petroleum Emulsions. R. E. Laird and J. H. Raney, Nov. 3, 1914. U. S. Pat. 1,116,299. Emulsions of petroleum oil and water are subjected to an electric stress for a sufficiently long

time to produce heavy currents through the water particles. The currents are interrupted to allow the coalesced particles to form globules of free water.

Cyanogen Compounds. J. E. Bucher, Nov. 10, 1914. U. S. Pat. 1,116,559. Free nitrogen is brought into contact with an extended surface of molten material, such as sodium cyanid, comprising as one of its constituent elements a metal capable

of combining with nitrogen and carbon and of acting as the base of a stable cyanogen compound under the temperature conditions of the operation. This metal is liberated from the material and, together with nitrogen, combined with the carbon

contained in an extended surface of catalytic material having carbon therein to form a cyanogen compound. A large extent of the surface of the catalytic material is maintained free from the bulk of the molten material by distilling off, during the course of the operation, a portion at least of the so formed cyanogen compound.

Oxidizing Lead. C. D. Holley, Nov. 10, 1914. U. S. Pat. 1,116,702. Finely divided lead is subjected to the simultaneous action of chromate waste liquor containing sodium nitrate and air; the oxidized lead and sodium nitrate are separated afterwards.

Alkali and Alkaline-Earth Metals. C. E. Acker, Nov. 10, 1914. U. S. Pat. 1,116,865. Metals belonging to either the alkali or alkaline earth groups are produced by electrolyzing a fluid mass of the desired metal belonging to such groups in a pri-

mary electrolytic cell over a cathode which forms a fusible alloy with the metal and afterward using the alloy as an anode in a secondary electrolytic cell containing an electrolyte comprising a molten cyanid of the light metal, depositing the light metal at the cathode.

Electrical Separation. H. M. Sutton, W. L. and E. G. Steele, Nov. 10, 1914. U. S. Pat. 1,116,951. Comminuted materials consisting of conductors and dielectrics are separated by sub-

jecting them to a directly and convectively delivered electrical charge and contacting the material with a source of opposite potential to attract the particles and to retain the dielectric particles while not retaining the conducting particles.

Manganese Steel from Scrap. H. M. Howe, Nov. 17, 1914. U. S. Pat. 1,117,384. Manganese steel scrap is melted in a shaft furnace and the relative proportions of manganese in the molten metal adjusted by adding a suitable quantity of ferro-manganese. Blown metal of the Bessemer process is then added to the mixture.