Ag and Food NEWSLETTER **Big Steel** U. S. STEEL is planning to go into the booming anhydrous ammonia market, producing am-Moves In monia from coke oven gases. C. F. Hood, president, says research studies involving separation of ethane, ethylene, cyanide, and methane from hydrogen in coke oven gases, are well advanced and problem now is to determine most economical method of hydrogen recovery. First installations will probably be made at plants in Geneva, Utah, and Gary, Indiana. Could signal an important trend in the industry, for largest steel producer may be able to successfully compete by producing ammonia from coke oven gases, in a field which until now has been dominated by oil companies producing product from natural gas. Ammonia From Ammonia plant to utilize hydrogen from chlorine-caustic process is under construction at **Chlorine Caustic** Columbia Southern Chemicals installation in Natrium, W. Va. Production unit to cost 3 Process million is scheduled to go into production by April next year, and will mark Columbia Southern's entry into ammonia business. Utilization of hydrogen from chlorine-caustic process is another example of new techniques being developed for ammonia synthesis, U. S. Steel and Alabama By-Products under way with plans for synthesis from coke oven gas also point up this trend. Columbia Southern plans to produce primarily for industry, but points out that they are not overlooking agricultural outlets in the area. 🖺 Soil DEPRESSION OF PLANT GROWTH of some crops is noticeable following application of as little as Residues 24 pounds of DDT per acre according to some studies now under way in Washington. Severe depression of growth of sensitive crops persists for 5 years or more following application of 119 pounds of DDT per acre. BHC at 15 lb. per acre or more is also reported to impair soil productivity, but chlordan and aldrin have little effect even at rate of 75 or 60 pounds per acre, respectively. West Coast work is part of a four-state study under coordination of the USDA. Grain INCREASING SALES OF GRAIN FUMIGANTS show the effects of the growing mountains of stored **Fumigants** grain throughout the U.S. Dow reports that sales of its grain fumigant EB-5 rose 93% in Up 1953; a continued increase of better than 25% is expected this year. Dow spokesmen, who believe their figures are roughly characteristic of the entire industry, cite three major reasons for increase: gradual northward movement of insect population, growing FDA insistence on clean grain products, and the increase in the amounts of grain in storage. **Gum Drops** CANDY INDUSTRY, by its own admission a laggard in the application of science to its activities, Go Scientific may be headed for a scientific revolution. Scientific Apparatus Makers' Association and National Confectioners' Association have been cooperating for past year in drive to convince candy manufacturers that research and quality control labs are important adjuncts to efficient operation. NCA and SAMA representatives, with assist from Sears Roebuck & Co. candy department, have served as consultants on setting up pilot laboratory in Chicago candy factory. Success of the pilot project, according to SAMA spokesman, will open new horizons for chemists, since relatively few candy makers currently utilize chemists services. Sears Pushes CANDY DEPARTMENT of Sears Roebuck has recently come forth with an announcement which **Quality Control** is expected to accelerate trend toward application of science in candy manufacture. A year ago, Sears developed specifications for ingredients in candies it purchases for sale; company has now taken another step, announced to its suppliers that within three years it will buy only from sources which have set up an acceptable form of scientific quality control. Time limit was chosen to provide a definite goal, yet give supplies an adequate time to comply. Rain Guns BRAZIL HAS PLACED A \$6 MILLION ORDER FOR OVERHEAD IRRIGATION equipment with a German manufacturer. The spraying devices called "rain guns" which propel water a lateral distance up to 180 feet are slated for use on Brazilian coffee plantations. Germans claim that overhead irrigation results in a saving of water up to 75% compared with surface irrigation techniques. Germans have also supplied rain gun equipment for Spain, South Africa, Egypt, and India. German government has sponsored extensive experimental farm testing of technique in Marhof, claim increased yields of 45% for vegetables, 52% for potatoes, and 20% increases of pasture

carrying capacity.