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Dr. Vosburgh, Dr. Cowle and C. H. Dantaizen.

They have had serious dermatitis from bakelite - two cases.

Look up the nature of sensitivity to skin irritants and the connection with metabolism. Vosburgh says a vitamin-rich and calcium-rich diet is a defense. He finds that the soap water used as cutting compound is often highly contaminated with germs, smells badly and causes dermatitis.

Dr. Cowle is collecting literature about asbestos. Merewether, the Englishman, has devised a standard of size and number of particles. Better go out to Pullman and interview their doctors.

Thyrite is being developed in Pittsfield as a possible substitute for the lead in the lightning arrester department. It is a mixture of clay, graphite and carborundum. The chemist says "All carborundum particles have a thin coating of silica."

Tungsten carbide is heavy and almost as hard as a diamond. It is used to make tool engines. They have used it here four or five years. It is called Carbaloy. The General Electric bought the patent from Germany. There have been two cases of asthma from sensitization.

* It is possible that the traces of phenol left in bakelite may be responsible for the dermatitis.

Dantaizen says that they have been using carbon tetrachloride enough to lose fifty gallons by the exhausts under the hoods, which would be about 10%. Now they are using Safety Solvent which is inflammable but not highly so and is cheaper than the former and does not evaporate so quickly. It seems to be the same as Stoddard solvent.



Carrier degreaser (England) is tetrachlorethane. It has a lower vapor pressure and higher density than CCl_4 . They use it in vapor form but in a closed conveyer. The hot vapor condenses on the cold machine and the liquid runs off. At the take-off there is a hood and the machine is water cooled. Dr. Cowle will make blood smears of these men.

They have one man who is becoming an addict to CCl_4 .

They use acetone for cellulose acetate tape. It is mixed with toluol, ^{or} iso-propyl alcohol (look it up).

Cecoline 1 and 2 is the name of carriers degreaser and it is made by the Roessler-Hasslachner Company.

Men using glyptol varnish which is not irritating sometimes wash it off with kerosene and in that way get dermatitis. They are trying an emulsifier such as tri-sodium phosphate, which is used in laundries.

I visited the foundries with Dr. Cowle; brass pouring has not given rise to any cases at all. The iron foundry for large castings has shot blasting, not much chipping and is very good. The one for small castings has a much lower roof and heavy clouds of irritating steam from the core binder, acrolein. It made my eyes and throat sting, but the men are accustomed to it. Even with windows in the roof and fans the air is thick, but there is not much dust. Shaking out is done at night in all foundries. The steel foundry was good but no shaking or digging out or chipping was being done. They are experimenting with an exhaust on the swing-carriage grinders. Those that can be swung from side to side. This will carry off the sparks which now are very abundant. They apply the silica wash with a wad of hemp-not a spray.

At one end of the cleaning building is pickling with hot H F in a closed tank. Under the same enclosure are two washing tanks with cold and hot water. The castings come out hot and dry quickly.

A man guides them to the conveyer without touching them. H F comes in drums which are kept outside, connected up with the tank and forced under three pounds pressure into the tank making a 10% solution.

X-rays are used in one small specially built shack with a lead-lined chamber, lead-glass window and a turn table worked from the outside. The operator stands outside. They do not use the fluoroscope.

Dr. Cowle has made estimations of the lead in the air of the resister department and found only one operator in danger. This man holds the resisters close to his face while brushing. She will now make blood examinations.

In the porcelain department one-third of the X-rays showed some mottling. Cermak is now ready to make all necessary improvements.