

MINING

Manganese Lack Drastic

Importation of manganese ore from Russia was cut to practically nothing in 1949. Only about 10% self-sufficient, this lack is an Achilles heel in our military might.

➤ NOT enough tanks, not enough guns, not enough armor for aircraft carriers. This is the down-to-earth nightmare which a single item on the suddenly critical "strategic materials" list—the lumpy ore of a metal called manganese—has brought to the men planning national defense speed-up.

Few people outside the government and the steel industry know of a Russian embargo which cut off the U.S. from its major source of manganese more than a year ago—and the desperate efforts which have been taken since then to fill the gap.

Special railroad ore cars were sent to South Africa, transportation experts went to India last year, in the attempt to make up the 350,000-ton annual U.S. import of manganese ore from Russia. This was suddenly cut to a mere trickle early in 1949.

The gap was closed, but this country is still vulnerable, for only about 10% of the manganese needs of the U.S. steel industry can be met by U.S. mines. The rest must be imported over long sea lanes.

There is no substitute for manganese in making steel, particularly the tough alloys needed for modern weapons of war. More manganese goes into steel than any other metal other than iron itself. If the supply were suddenly cut off, American steel furnaces would cool and close down.

Russia is self-sufficient in manganese. The U.S., far from that happy state, has been trying to find ways to boost its own output. We have low-grade ore, but processing it is expensive. Few companies have been able to meet competition of imported ores. The Senate is considering a bill which would aid rapid development of our own deposits.

The U.S. Bureau of Mines last year did a lot of research on ways to recover manganese from the slag piles outside open-hearth furnaces. There is theoretically enough manganese in these waste heaps to make up the amount we formerly imported from Russia, and to make this country 50% self-sufficient.

Government geologists drilled tunnels into hot, dusty, waterless Artillery Peak in Arizona and found vast reserves of manganese. But again they were so low in grade as to be usable only in a real emergency.

If Russian submarines on the high seas were to create that emergency, the steel industry almost immediately would have to delve into U.S. stockpiles (how big these are is a secret). After they are gone, where the steel furnaces would get manganese for artillery and armor is the question now stalking the re-awakened American defense effort.

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top young scientific personnel. A significant proportion of scientific personnel is in the reserves.

Some manpower experts believe that, sooner or later, competition for personnel will have to be stopped and that a new federal agency will have to allocate men and women among all components of our war effort. They point to the lack of a backlog of unemployed, the high level of production and the foreseeably great needs of the military as reasons for believing that it will be sooner rather than later.

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MILITARY SCIENCE

Red-Conquered Korea a Dagger Confronting Japan

➤ IF Korea is completely conquered by Red forces, it will be a dagger pointed at the heart of American-occupied Japan.

History and geography show that Korea is by no means only an out-of-the-way place suitable for a preliminary testing of American strength and reactions. Ever since Japan came out from isolation in the 1860's, Korea has been the subject of a life and death struggle between Russia, China and Japan and the key to control of a vast

GENERAL SCIENCE

Manpower, Pro and Con

➤ PRESIDENT TRUMAN will soon be forced to decide a top-level quarrel between the Pentagon and the National Security Resources Board over the utilization of manpower, Science Service has learned.

Being dragged to his desk for decision are two schools of thought about the draft and the induction of reserve officers. Some influential top brass want as few deferments as possible, not caring whether the nation's laboratories and industries are stripped of precious scientific personnel. Leaders of science and NSRB Chairman Stuart Symington are working to see that skilled manpower is allocated to the job it can do best for the country, whether it be in service, in industry or in university laboratories.

In the opinion of those who are plugging for an all-out view of manpower rather than the Pentagon view, the manpower muddle has become worse instead of better recently.

The following things have happened, or have been prevented from happening:

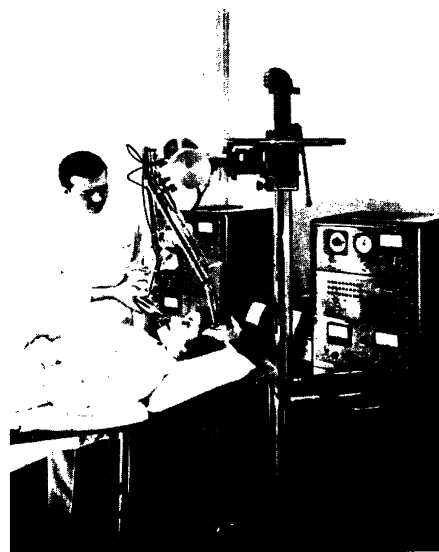
1. A committee of Selective Service that spent the last three years drawing up a program for deferment of those physicists, chemists, biologists and others who would be of more use as civilians has seen its plan shelved until September at least.

2. Only a stop-gap plan to prevent calling up of key scientific personnel who are members of the reserve has been approved.

3. A long-range, overall manpower program being worked out by planners in the National Security Resources Board has been held up by the military.

4. Forces on both sides are preparing to go to the President.

It is even more likely now that many of our great industrial laboratories, upon whom we will depend for new weapons, will be denuded of up to one-third of their



ATOMIC ROBOT—The "Isotron," a weird looking chromium monster with flashing lights and electronic brains, helps to pinpoint brain tumors which have baffled expert diagnosticians. Making skull incisions needless, the patient is simply given an injection of a radioactive isotope. The "tracer" accumulates in the tumor tissue and gives out messages which are received by two Geiger counter arms. Readings are taken at 32 spots and then the evidence is considered.