Wonders of Molybdenum

Among the remarkable industrial developments to which the European war has given impetus has been the enormously enlarged use of the rare metals, molybdenum and vanadium, as well as tungsten, which are all wonderfully beneficiators of steel and seem to have in many respects a strange kinship in their attributes and functions. Of these three, perhaps the least familiar is molybdenum, which is largely used by the forgemasters of Europe. The world is being thoroughly prospected at the present moment to find new commercial resources of molybdenite or wolframite. In addition to its use in steel making, molybdenum is of value in producing a blue pigment of striking beauty in the decoration of porcelain, as a mordant in fixing certain delicate and otherwise fugitive shades in the dyeing of silks and woolens, for imparting unique colors to leather and rubber obtainable by the use of no other color producer, and in the form of ammonium molybdate as a sterilizer and disinfectant for plushes, such as are used for railway carriages, and also for fire-proofing muslin and other textile fabrics.

Rifle barrels, propeller shafts, submarine hull plates, armor plates for naval vessels, wire and projectiles, are a few of the munitions materials that are now being made of molybdenum steel by all the European nations.

Some of the great howitzers are made with linings of molybdenum steel, which not only withstands better than any other steel the enormous stresses of modern high explosives, but owing to its high melting pot it is less affected by the heat of the gases released and thus provides ordnance far longer-lived than that made of any other steel. Projectiles of molybdenum steel possesses a power of penetration of the hardest armor plate in excess of those made of other material.

For crank and shaft forgings, bank vault door, permanent magnets, high pressure boiler plates, and self-hardening high-speed machine tools, molybdenum possesses many advantages over either tungsten or vanadium steels. Machine tools used in lathes for turning down the hardest steels, as in the case of shrapnel shell cases, if made of molybdenum steel, permit revolution at a rate so much faster than is possible with carbon steel cutters as to multiply manyfold the capacity of output, with the added advantage that though the friction induced heats the steel tool to redness, its temper is not in the slightest degree impaired, either by the heating, or by the subsequent cooling. Vault doors of molybdenum steel increase in hardness with age, so that they become less and less penetrable by the burglars' drills with the progress of time.

CANADA SCORES HIGH AT KANSAS EXPOSITION

Western Canada scored hiigh at the international Seil-Products Exposition at Kansas City capturing a total of one hundred and four prizes. These include first, second, third and sweepstakes in wheat; first second, third and sweepstakes in oats; first, second, third and sweepstakes in barley; first second in flax. Seager Wheeler of Rosthern, Saskatchewan, won first, sweepstakes and the $500 silver cup offered by the Canadian Pacific Railway Department of Colonization and Development for the best half bushel of hard spring wheat. H. B. Sheeley of High River, Alberta, was second in this competition. Nick Taitinger of Claresholm, Alberta, won first and sweepstakes for barley; Province of Manitoba first for state vegetable collection; Kildonan first for county vegetable collection.
