Advances Made in the Making of Steel

Advances in metallurgy have produced steels more perfectly adapted to the demands of the engineers—hence more efficiency. The auto fender for which formable steel has been developed is leading to great economies in manufacture. Another is steel cable for bridges which has increased

Ingot molds lined up preparatory to receiving molten steel.

in tensile strength from 160,000 pounds per square inch in 1870, when the Brooklyn Bridge was undertaken, to 225,000 in 1927, when the George Washington Bridge in New York was built—a development which has brought about longer spans and heavier loads.

Iron is the basic raw material of industry for it actually enters into the mechanics of practically every form of industrial energy production. During the period, from about 1850 to 1890, [illegible]nation was busy laying [illegible] absorb large quantities

of iron and other tonnage materials and it drew its energy almost entirely from coal. The country was primarily agricultural and the wonders of industry were considered to be no more than adjuncts to an old order.

The supply of iron scrap has reached 245 pounds per capita per annum, and while this is not enough to provide for all industry, it is enough to furnish about 40 per cent of the net domestic requirements.

The United States is not great by nature or by accident. It is great by the act of man. It has become the greatest agricultural nation on earth, ranking first, second or third in most of the basic commodities, producing a third of the world's iron ore; and 27 per cent of the steel.

The measure of civilization is the individual's power to consume—to make use of—the resources of nature. In our present industrialization we have created the possibility of an entirely new era for mankind.