STOCAD I SUPPLY



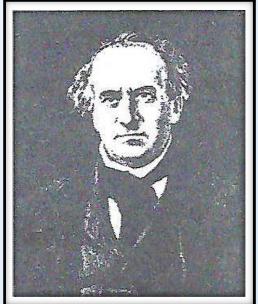
THREADED FASTENERS HAVE COME A LONG WAY

since the first manufactures, and so has the terminology used to describe threaded fasteners.

THE FIRST BOLT FACTORY IN AMERICA

This venerable structure is one of the most interesting relics preserved in connection with the earliest history of the bolt and nut industry of America; and it presents a graphic illustration of the humble nucleus from which sprang what has become one of the most extensive and useful industrial activities of the present day.

Originally, fasteners were manufactured by Blacksmith's. The bolt-and-nut branch of the fastener industry was inaugurated by **Michah Rugg** in Marion, Connecticut, in 1839.



Rugg was a Blacksmith who opened his shop there in 1818. Over the years he gradually narrowed his wares to a few specialties, such as scythes, traps, and bolts. His crude thread-cutting lathes were similar to those of Jacques Besson 300years earlier. His only "power" was a bull on a treadmill, operating the bel-

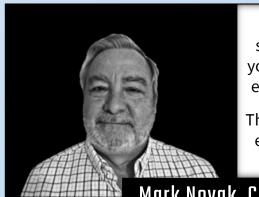
lows to his forge, where he formed the bolt heads.

The building was 30 feet long, 20 feet wide and the posts were 9 feet high. The forging shop was in the left hand end of building, and the packing, shipping and storage room in the fight hand end. This room occupied two-thirds of the floor space of the building.



In 1839, Rugg invented a machine for forming the heads on bolts. It consisted of a vise-like heading block and a foot-powered treadle connected to a lever that held the bolt blank firmly while the head was being formed by a hand hammer. The result was a great increase in the production of bolts and ultimately a reduction in price.

So beginning in 1839 Rugg devoted his time entirely to making carriage bolts and nuts. In 1840 he and Martin Barnes, a local farmer, formed the partnership of Rugg & Barnes, the first company to manufacture bolts and nuts for the trade.



sentative is trained to assist you in the decisions you make each day in buying fasteners.

They stand ready at your nearest branch to help you solve your fastener dilemma.

Mark Novak, Chief Fastener Specialist