

# MIRACLES IN

**D**ESCRPTIONS of the post-war world frequently sound like wondrous Wellsian visions, with all-plastic homes, motor cars, trains, and aeroplanes, with helicopters dropping down on to hotel roofs or the back lawn, with disease all but conquered and life prolonged, with television, electronics, jet propulsion, and a score of other modern marvels. It all seems too wonderful altogether, and yet strange to say much of it is already in existence or is about to come into our life. In this world of the future there is one material which is going to play a vital part. It is glass.

Probably the oldest plastic of all, glass is indispensable in the modern life and its uses are almost unlimited. In war, in science, in industry, in building, and, in fact, in almost every side of life it is making a vital contribution to progress. Little short of miracles have been produced from this age-old material.

*Glass can be made sufficiently strong for building, it can be spun like silk into the most delicate fabrics, it can be sawn like wood, and it can be rolled like cotton wool. It can provide the well-dressed male with a neck-tie that will not stain, the fastidious housewife with draperies that will not burn or fade, and industry with glass wool for insulation, non-corrosive pipes, and jewels and gauges of highest quality. In the past man has owed much to glass; in the future his debt promises to be even greater.*

Modern though glass appears, it has a history that dates back to the earliest Egyptian civilisation. In the tombs unearthed in the land of the Pharaohs have been found articles of glassware that date back to 1800 B.C. Pliny, the Roman historian, tells how Phoenicians invented glass by accident 5000 years ago, but his tale of melted sand, soda and limestone around a camp-fire, amusing though it is, is regarded as dubious folk-lore. It shows, however, that glass was already well known to the earlier civilisations, even though it was not until the beginning of the Christian era that glass-blowing was invented. With this discovery, the making of glass entered a new phase.

As the new trade spread through the civilised world, every country added something to its development. Greatest of all glass-making centres in Europe for many centuries was Venice, which still enjoys a just fame for its products. It was in 1291 that the city's glass-ovens were removed to the island of Murano, owing to the danger of fire, and from then on the secrets of the industry were so jealously guarded that penalties of death and torture awaited anyone who revealed them.

The sixteenth century was the great period of Venetian glass, a period that gave birth to those spirited, graceful, airy forms of vessel which are due solely to the glassblower's labour and which established for the city a reputation that was envied throughout the known world. Even though renegade