should seat on both sides. This gives you double security. Some old styles had straight plug discs that wedged out to the seats by the pressure of the stem screwed down inside but these have been discarded (Fig. 5). The solid wedge disc is the most reliable type of gate valve although a very good double disc gate valve can be made with ball and socket joint up to 3 in. | for moderate pressure. The larger gate valves are sometimes

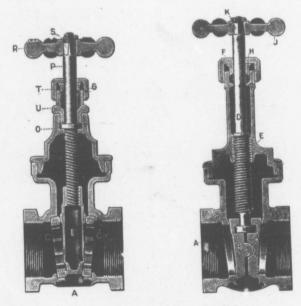


Fig. 5.—Some types of brass gate Valves.

fitted for operation by a chain connection to the hand wheel. Also with gear lift and hydraulic or pneumatic lift.

There is also a quick opening type of gate valve as shown here very "handy" for handling steam, water, liquors, syrups, etc., and used for testing and a number of different purposes.

(Fig. 6). More flanged valves in both the globe and gate type should be used and especially in the larger sizes rather than screwed valves.

Valves from 5 in. up are often fitted with by-passes (Fig. 10), especially for the higher pressures. It is a good plan in connection with by-pass valves to have two valve seats so that you are always ready for emergency. If one seat goes out of commission you change your valve trimmings to the other side