

## 9.2 Drain Pipes, etc.

### 9.21 IRON PIPES.

- 9.211 Specimen of 2-inch iron pipe, galvanized.
- 9.212 Specimen of 4-inch plain iron pipe.
- 9.213 Specimen of a 4-inch iron drain pipe with cleansing flange on end.
- 9.214 Iron manhole cover with double water seal.

### 9.22 TILE AND STONEWARE PIPES.

- 9.221 Models of ordinary tile drain pipe, simple joint with cement. In laying ordinary tiles, and iron drains, the difficulty is to keep the invert perfectly true.
- 9.222 Models of stoneware drain pipe, with bituminous collar, to insure a perfect invert. The joint is completed with Portland Cement.
- 9.223 Full size 6-inch tile drain pipe.
- 9.224 Two specimens of tile inverts for sewers.

### 9.23 JOINTS, PLUMBING, ETC.

- 9.231 Specimen of 4-inch iron piping, showing method of lead caulking for joint.
- 9.232 Specimen of wiped solder joint. This shows the junction of lead pipe to brass collar.
- 9.233 Specimen of wiped solder joint: junction between two pieces of iron pipe. The bright iron is coated with a thin layer of copper, by rubbing the surface with the copper soldering iron.
- 9.234 Specimens of wiped solder joint: junction between two pieces of lead pipe. This is the best method of joining lead to lead, the resulting joint is very strong; occasionally one sees a seamed joint between two pieces of lead. It is not to be recommended, because the joint is weak and liable to crack.
- 9.235 Patent solder joint.
- 9.236 Model of eccentric joint for iron piping. The mechanism insures a perfectly true invert. The joint is caulked with molten lead, precisely the same as any other simple joint.