216. The brake-bands of the rig shall be of suitable dimensions, and shall be manufactured in such a way that with ordinary care sparks will not be produced. For this purpose the brake-bands shall be lined with vulcanized fibre or other material which will not emit sparks.

Provided that if an iron brake-band be used upon a wooden wheel suitable provision shall be made for an adequate supply of water to be applied to the brake-band.

217. Tools shall not be raised with a Canadian slipper-out during the movement of the walking-beam. The steel wheel shall be provided with a double dog.

218. No engine other than a stationary engine shall be used when drilling by steam-power.

BOILER-HOUSES AND BOILERS.

219. Every boiler-house shall be so situated that the prevailing wind will divert inflammable gas therefrom. Every boiler-house shall be securely roofed with non-inflammable material. This regulation shall not apply to any boiler-house existing on the 3rd August, 1915.

220. Boiler-houses shall be of adequate dimensions to permit safe and convenient access to all parts of the boiler.

221. Between the firebox and the nearest end of the boiler-house there shall be a clear space of at least 6 ft. The floor of the boiler-house shall not be constructed of inflammable material.

222. The roof around the boiler-chimney shall be constructed of sheet iron for a distance of 2 ft. from such chimney. Between the boiler-chimney and the roof of the boiler-house there shall be a sheet-iron pipe, which shall project above the roof. The chimneys of portable boilers shall be at least 26 ft. high, and of sufficient diameter to allow the escape of smoke. All chimneys shall be provided with approved covers and spark-arresters, which shall be frequently cleaned from soot.

223. In the event of a dangerous outburst of oil or gas the fire in the boiler shall be extinguished as quickly as possible. Withdrawal of the fire is prohibited. Where oil or gas is being used for fuel a throttle valve to control the flow of the oil or gas shall be provided on the pipe-line outside of the boiler-house and at least 20 ft. from the wall thereof.

224. In the event of an outburst of oil or gas possessing extraordinary force, the well-manager, or, if he is not present, the next in authority, shall see that the boiler-fire is extinguished, and such other precautions are taken as are necessary for saftey. He shall also immediately notify the Inspector of the occurrence.

225. Ashes from any ash-box shall be completely extinguished before removal from the boiler-house.

OTHER BUILDINGS AND MACHINERY.

226. Offices shall be provided at all well operations, but the Inspector may, if he considers it desirable, permit one office for several well operations under the same proprietary if such operations are not separated by too great a distance.

227. Buildings at measuring-stations shall be at least 33 yards distant from any smithy, boiler-house, dwelling-house, workmen's rooms, offices, or public roads, and shall be adequately ventilated.

228. Every oil-pumping station shall be at least 50 ft. away from any dwellinghouse, smith-shop, or public road. This regulation shall not apply to any station in existence as at the 3rd August, 1915.

229. Every oil-pumping station shall be kept perfectly clean and adequately ventilated.

230. The doors of all buildings situated in the precincts of any well shall open outwardly.

231. Adequate light and ventilation shall be maintained in the derrick, the buildings connected therewith, and in all working-places.

232. All buildings in the precincts of any well or oil-tank shall be covered with fireproof material, and spark-arresters, not constructed of wire gauze, shall be placed on all smithy chimneys.

233. Within the precincts of any well no person shall sleep in any other than a recognized dwellinghouse.

234. No person shall be admitted to any building used in connection with well operations, except on business.

235. There shall be submitted to the Inspector for his approval, not less than one month previous to the commencement of the installation of any gas or electrical motor or dynamo, unless required for lighting purposes only, complete working drawings and specifications of such installations.

236. All parts of electric installations shall be covered or otherwise protected from accidental injury.

237. Electric installations, when not specially provided for in these regulations, shall be subject to the Regulations for the Installation of Electricity, under the Mining Act.

238. There shall be attached to every gas-engine an automatic starting-device.

239. All moving and rotating parts of engines and other machinery, also all steam-pipes and electric-current conductors, shall be protected from accidental damage.

240. No inflammable material shall be used for protecting or covering steam-pipes in the vicinity of well operations.

241. All pipe-lines shall be of adequate strength, and securely jointed.

242. Workmen employed about the engine shall not wear loose-fitting outer garments.

243. Belts shall not be attached by hands to moving pulleys.

244. No person shall lubricate any machinery while in motion, except when machinery may not be adequately lubricated when stationary.

245. All engines shall be started and stopped with care, and such starting or stoppage shall be indicated by signals which may be seen or heard by the workmen employed thereon.

Oil and Gas Tanks.

246. Every oil-tank at well operations shall be constructed of fireproof material, and shall be efficiently protected and closed.

247. Tanks shall be encircled by a high and strong embankment, constructed at an adequate distance from such tank. The open space between embankment and tank shall be kept clean and free from obstruction.

248. The roof of each tank from which gases are not led away through pipes shall contain a ventilator which shall be covered with a copper gauze having at least 784 apertures per square inch or shall be equipped with pressure and vacuum safety-valves. The cocks and valves of the outlets of every tank exceeding 3,000 gallons in capacity shall be kept locked.

249. To all tanks exceeding 16 ft. in depth there shall be attached a strong iron ladder. If the roof of the tank is convex, access to the manhole shall be secured by means of iron railing.

250. Every iron tank exceeding 3,000 gallons in capacity shall be provided with a lightning-conductor, which shall be erected by a competent person.

251. Oil which has consolidated shall be heated with steam only; fire on no account shall be used.

252. A burning tank shall not be extinguished with water, but oil within the tank shall be withdrawn through the outlet-pipes to other tanks or pits. Smaller tanks or barrels, if burning, shall be covered with sand, wet sacking, or other suitable material.

253. No oil-tanks exceeding 3,000 gallons in capacity shall be constructed or placed within 40 yards of any building containing a fire, or any public road. For any smaller tank the distance shall be at least 20 yards. This regulation shall not apply to any tank in position on the 3rd August, 1915.

254. The cleaning of all tanks shall be carried out in the following manner: Wooden oil-tanks and oil-pits shall, after the extraction of the oil, be partially uncovered and ventilated for at least twenty-four hours, and if a steam-boiler is available the tank shall be blown out with steam. The cleaning may be proceeded with afterwards, from the outside if possible. If cleaning is indispensable and cannot be done from the outside, unless self-contained breathing-apparatus is worn, only one workman shall be employed in any tank at one time, in which case the workman shall be secured by a rope, and shall be attended by a supervisor and another workman.

255. Outlets of adequate dimensions for ventilation shall be placed in the roof and near the bottom of every iron tank. The ventilation and blowing-out of every larger tank shall be continued until it is safe for the workmen to enter.

256. Every well in which boring has been suspended, and which produces a considerable volume of gas, shall have its outlets so constructed that gas may be conducted therefrom through pipes, provided with suitable valves, and if the gas is issuing from the well at high pressure, a proper gas-regulator shall be provided.

257. A separate gasometer shall not be compulsory if oil and gas is conducted from a well to a separator which is more than 33 yards from any operative well, building having a fireplace or stove, or a public road.

258. If a pipe-line connects with a gas-main of equal diameter, conveying gas from another gasometer, a separate gasometer is not compulsory.

259. The above regulations do not apply to gasometers which were in existence on the 3rd August, 1915. Gasometers and gas-separators shall be of adequate capacity and strength, and shall be provided with two approved safety-valves.

260. Gas-pipes from any gasometer to a boiler shall be free from oil.

261. Every pipe-line connecting any well with a gasometer or separator shall be provided near such gasometer or separator with a valve, which shall be closed in the event of the pipe-line becoming disconnected.