

An intercommunication system utilising two separate lines between each station and having several other special features, is that of Dictograph Telephones, Ltd. A typical circuit is shown in outline in Fig. 603, but many varieties are possible. Full intercommunication is possible between the ten ordinary stations,

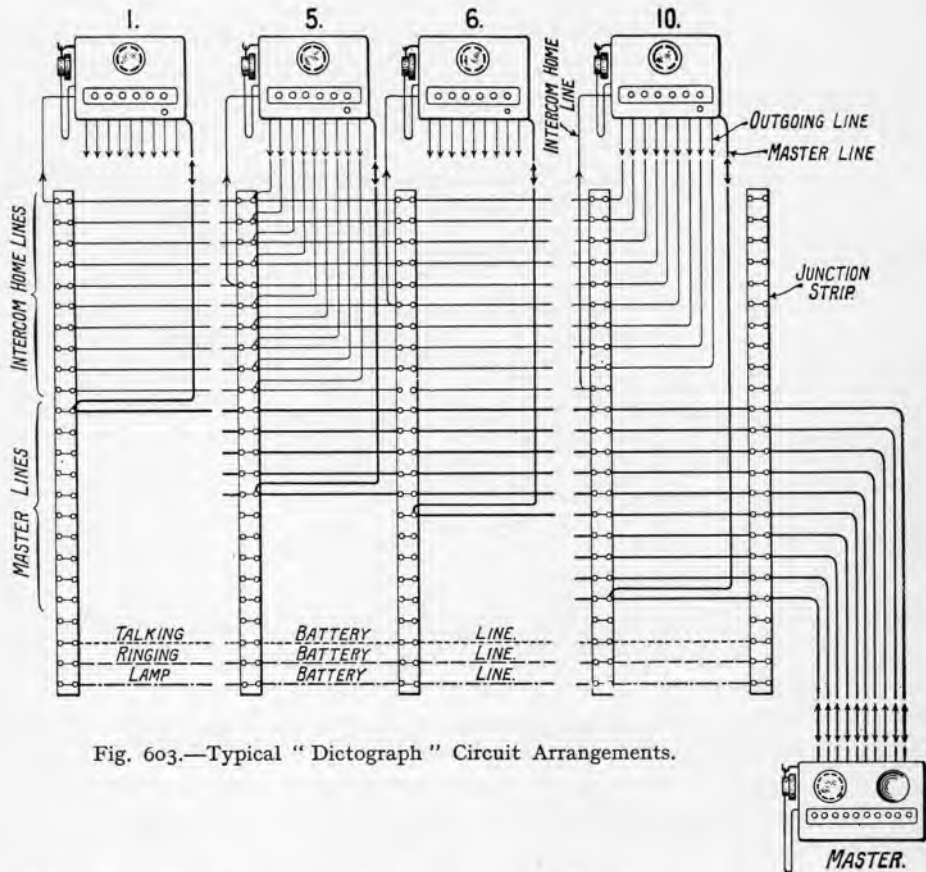


Fig. 603.—Typical "Dictograph" Circuit Arrangements.

while the Master can obtain any of the ten stations, and by a special feature can indicate that it is calling even if one of these is engaged; this is done by means of a white lamp at the sub-station. Since a double line is provided between each station, and is fed from both ends through isolating induction coils, the system gives secrecy. Another distinctive point is that it utilises sensitive microphones and a loud speaker at the Master station. The latter is intended for, say, the Managing Director's desk in a large factory. By its aid he is able to get into communication

with any of the heads of departments, who naturally reply expeditiously when they are warned by the signal lamp that the Chief is calling. No hand set is required normally, the Chief speaking in ordinary tones and hearing replies in similar volume. By throwing more calling switches he may have several departmental heads on his line in conference, they will all hear him and each other, and can take a natural part in the conversation. If, however, a visitor is present, and some confidential information is desired, the Chief can utilise a receiver, by taking which off its rest the



Fig. 604.—Interior of Dictograph Master Station, showing Arrangement of Loud Speaker.

loud-speaker is automatically cut out. Further, if a station calls the Master when it is engaged, or when it is inconvenient to reply, a switch can be turned to stop the calling buzzer, at the same time the station which called is indicated by a flag appearing opposite its respective switch, so that at a later period the Chief can ring him and discover the reason for the call. It

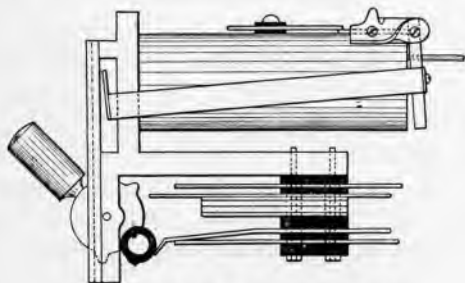


Fig. 605.—Type of Switch used on Dictograph Telephones.

will be seen that these facilities are very convenient. Two or more Masters can be provided, and more substations, some of the latter can have their calling facilities restricted, and other modifications are possible. Loud-speakers are not provided at the substations, which are fed for talking, ringing, and Master lamp

indicators, from common batteries, the Masters have, however, local batteries for talking purposes. A specially well-arranged junction box is one of the good features of the system, which is usually laid out to a definite colour code of conductors. Operation

is very simple, being merely a matter of throwing a switch to call or to receive a call, restoring this to normal when the conversation is finished; the last item is effected automatically at the substations by the act of hanging up the receiver. A recent development of this system enables it to be used in conjunction with automatic exchanges, thus making it of wider application without sacrificing its specially advantageous characteristics.