

- Parts required:
- 22 of No. 1
  - 24 " 2
  - 8 " 3
  - 16 " 4
  - 20 " 5
  - 24 " 6
  - 18 " 8
  - 16 " 9
  - 2 " 9D
  - 4 " 10
  - 72 " 12
  - 4 " 12A
  - 1 " 13A
  - 2 " 14
  - 1 " 16
  - 5 " 16B
  - 1 " 18B
  - 4 " 25
  - 1 " 26
  - 1 " 27
  - 4 " 27A
  - 1 " 32

- Parts required:
- 337 of No. 37
  - 6 " 40
  - 1 " 47
  - 6 " 48A
  - 1 " 48B
  - 3 " 48D
  - 3 " 52
  - 4 " 53
  - 8 " 59
  - 2 " 72
  - 3 " 94
  - 2 " 95
  - 1 " 95A
  - 2 " 96
  - 1 " 96A
  - 4 " 98
  - 4 " 99
  - 16 " 100
  - 4 " 108
  - 2 " 121

Electric Motor

The Eiffel Tower in Meccano

the structure had reached the height of 720 ft. it was found to be absolutely correct. The total cost of the tower was £260,000, of which the State contributed £60,000.

**Electric Lifts for Visitors**

The total height of the tower is 984 ft. from the ground or 1094 ft. above sea level. The first platform is 189 ft. up—only 27 ft. lower than the towers of the Cathedral of Notre Dame, Paris. The second platform is 380 ft. up and the actual tower that rises from this second platform is 526 ft. in height, finishing at the third platform at a height of 906 ft.

The campanile and lantern above the third platform bring the structure to its full height of 984 ft.—more than twice the height of the dome of St. Paul's Cathedral. A further comparison will no doubt interest the large numbers of our readers who have visited Blackpool. The Blackpool Tower, which seems to reach almost to the clouds, is only 500 ft. in height—scarcely more than half the height of the Eiffel Tower!

The Tower proved a great commercial success during the Exhibition of 1889, and tens of thousands of visitors took a trip to the top to enjoy the wonderful view. Afterwards it was found to be unprofitable, however, and was eventually taken over by the municipal authorities of Paris, partly with the idea of using it as a scientific observatory. The tower has always been very popular with sightseers on account of the marvellous view of Paris and its surroundings that can be obtained from the highest gallery, and for the use of these sightseers electric lifts are installed. Several spectacular feats, such as climbing to the top by means of a

loose rope and cycling from the highest platform to the ground, have also been staged from the Tower.

**The Tower during the War**

During the war the Eiffel Tower proved of the greatest value as an anti-aircraft observation post, enabling warnings to be sounded on the approach of Zeppelins or Gothas. Also it has for many years been one of the most powerful radio stations in the world. Many Meccano wire-

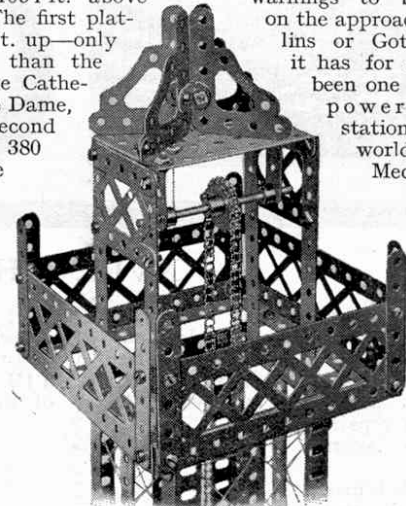


Fig. A

less amateurs, and especially those who possess valve sets, are familiar with the well-known call sign of the Eiffel Tower—FL. In this connection

the Tower received what is perhaps its greatest vindication when General Ferrie, Inspector of French Military Telegraphs, said that "FL" served so many important scientific and military purposes that if such a tower had not already existed it would have been necessary to build one.

It is interesting to know that last year the Tower received the fifth coat of paint since it was built.

Some idea of the vastness of the undertaking may be obtained from the fact that thirty tons of paint were used in the process and the job occupied 100 men a total of 4,000 hours! Eiffel was always extremely proud

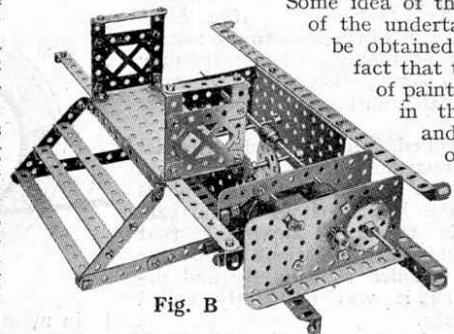


Fig. B

of his achievement, and the success of his original plans must have been a source of great satisfaction to him. Until the time of his death, in December 1923, he maintained a flat on the third floor of the Tower. There, 906 ft. above the ground, the great engineer would retire to his comfortable room to think in quietness of the past and plan out new schemes for the future.

**The Eiffel Tower in Meccano**

The Meccano model of the Eiffel Tower is well known.

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