



8 The Tower, from top to bottom

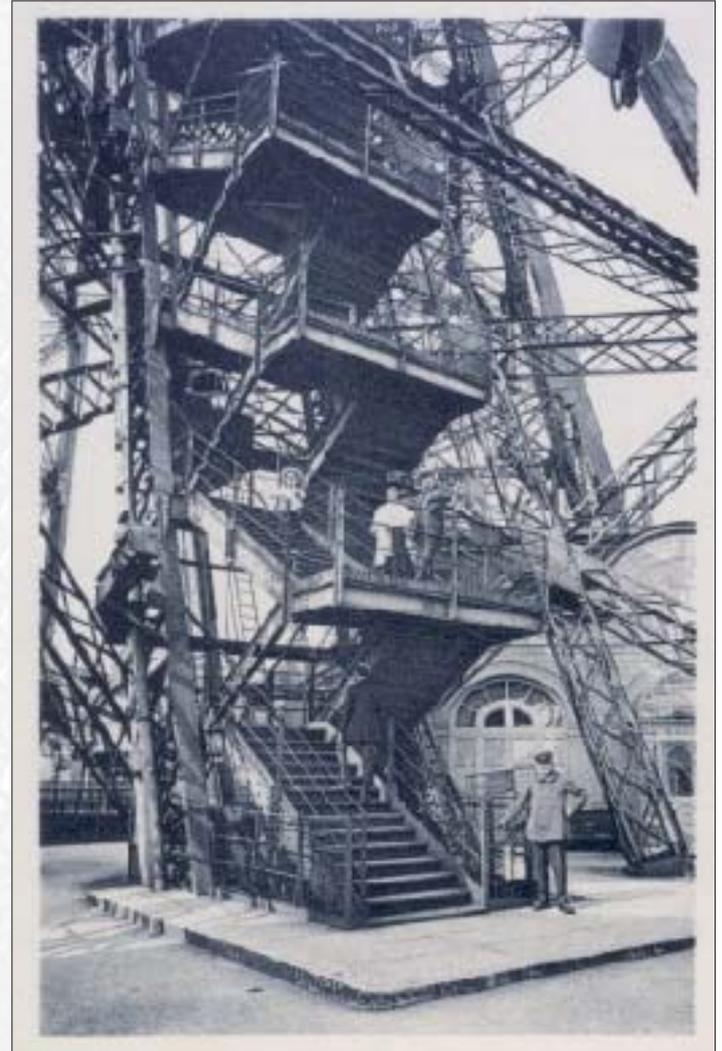
Stairs

In order to reach the top of the Tower, one must climb 1,665 steps, but the staircase that goes from the second floor to the third floor is closed to the public.

The spiral staircase going from the second floor to the top was disassembled and cut out into 24 sections in 1983. A part of it remained in the Tower and is displayed on the first floor, three sections were given to French museums (Musée d'Orsay, Musée de la Villette in Paris, and Musée de l'histoire du Fer in Janville-Nancy), and other sections were sold by auction. In November 2007, one of these sections that was 4,50 m high and weighed more than 700 kg was bought by a Dutch company at a price of 180,000 euros.



Spiral staircase from the second floor to the third floor

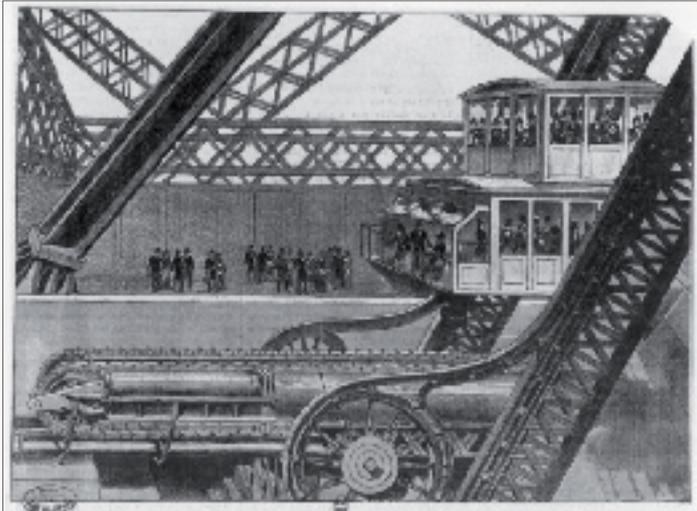


Staircase from the first to the second floor (357 steps)

In order that all visitors could easily reach the floors, it had been planned from the very beginning to install lifts that would serve the different levels.



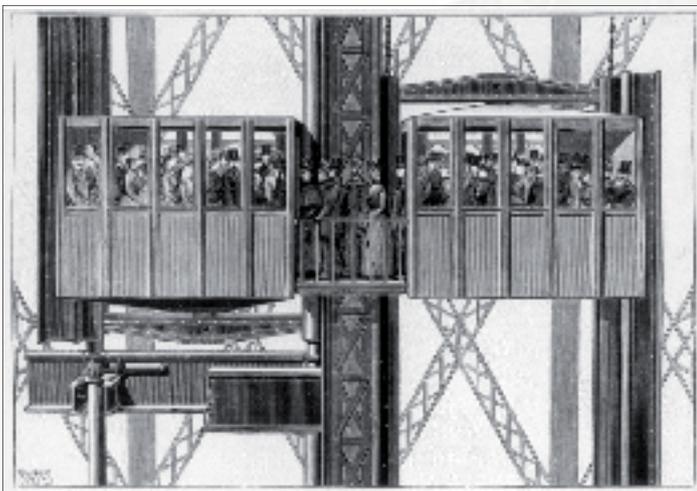
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System of the Roux and Combaluzier lifts

The North and South pillars were equipped with Otis lifts that served the lower two floors by ways of a two-storey lift cage drawn by a cable moved by an hydraulic jack. The South and North lifts were changed in 1910.

In the 1950s and later during the eighties and nineties, the increasing number of visitors called for the need to modernize the lifts and to install new computer operated systems of larger capacity.

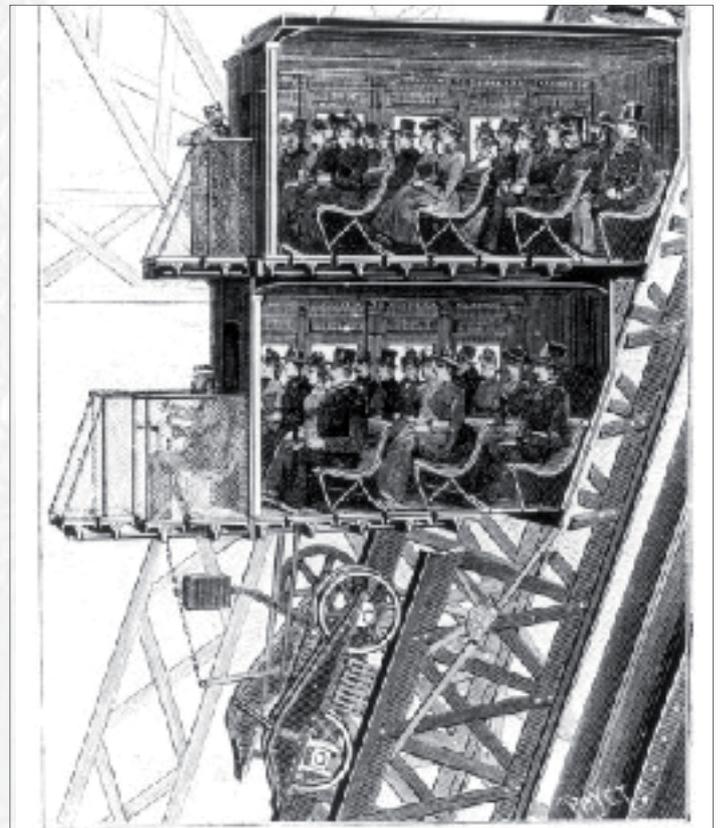


Edoux lift to go from the 2nd to the 3rd floor of the 300 m Tower – The shafts are located on the intermediate floor so that the passengers can transfer from one to another at a height of 240 m

Lifts

In 1889, the French company Roux, Combaluzier et Lepape installed the lifts serving the first floor along the East and West pillars.

Ten years later, before the 1900 Universal Exhibition, these were replaced by hydraulic lifts manufactured by Fives-Lille.



Section of the shafts of the Otis lift – B&W illustration by Poyet - La Nature 1889 p. 360

To connect the second and the third floors, the hydraulic piston operated Edoux lift with transfer half-way up, remained into operation until 1983, when it was replaced by two electric lifts.



The Tower, from top to bottom

Exercices
CP - CE1



French / Reading / Vocabulary

EDUCATIONAL OBJECTIVE

Finding antonyms of adjectives, verbs and nouns.

- Write the following sentence on the board.

Auras-tu le courage de monter les 1 665 marches d'escaliers pour atteindre le sommet de cette grande Tour ?

- Ask the pupils to find the contrary of the verb monter. Find other words for which the antonym can be found in the sentence: sommet / bas, base ; grande / petite

- Ask the pupils to find the antonym of the following verbs:

descendre : entrer :
ouvrir : éteindre :

- Have the pupils find the antonym of the following adjectives :

petit : vieux :
lent : léger :

- Ask the pupils to find the antonym of the following nouns :

le début : la l'arrivée : le
le bruit : le la tristesse : la

Mathematics

EDUCATIONAL OBJECTIVES

Reading information given by ways of figures in a table.

Solving easy problems.

- 2008 Individual rates

From 15 th March 2008 to 3 rd April 2009		
Lift	Full rate (Adults/children 12 and +)	Reduced rate (children 3 to 11 years old)
Top	12 €	7 €
2 nd floor	8 €	4 €
1 st floor	5 €	3 €

- After having explained the table (meaning of the words individual, adults, full rate, reduced rate) and after having learnt how to read the table (line, column), ask the pupils to find the following rates (as a class activity or individually using a slate): 1 adult 1st floor, then 1 child for the 1st floor and then 2nd floor, and last to the top and check that the table is read accurately.

- Then give a few problems to the pupils, relating to prices applicable to 2 adults to the 1st floor, 1 adult and 1 child to the 2nd floor, etc...

Discover the world

EDUCATIONAL OBJECTIVE

Learning a few rules about hygiene and individual and group safety.

- Concerning the staircases and lifts, remind the pupils about some of the safety regulations that apply in their school (if there are any staircases and/or lifts), in buildings, and in monuments (no rushing around, do not go on a lift without an adult, how to handle emergency buttons...)

- Prepare a set of rules that should be obeyed when walking in the school or during educational trips (visits, sports facilities...).



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Exercises

CE2 - CM1 - CM2



French / Reading/ Grammar

EDUCATIONAL OBJECTIVE

Identifying and constructing negative, interrogative, injunctive and exclamatory sentences.

- Have the pupils read the sentences and explain the types of sentences.

Quelle montée ! Attends-moi ! Tu vas trop vite ! N'es-tu pas fatigué après toutes ces marches ?

- Have the pupils write these sentences in the negative form.

- Have the pupils make the relevant transformations as requested.

La Tour est superbe. → interrogative

Je monte tout en haut → négative

Vous photographiez la Tour → injonctive (impérative)

Les ascenseurs sont rapides → exclamative

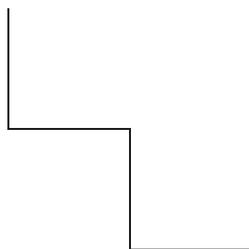
Mathematics / Geometry

EDUCATIONAL OBJECTIVES

Recognizing and tracing perpendicular lines.

Using a ruler and a setsquare to draw lines.

- Have the pupils complete the drawing of the staircase, a ruler and a setsquare.



Mathematics / Problems

EDUCATIONAL OBJECTIVE

Reading the information contained in the tables, solving problems written in the form of tables.

- 2008 individual rates

From 15 th March 2008 to 3 rd April 2009		
Lift	Full rate (Adults/children 12 and +)	Reduced rate (children 3 to 11 years old)
Top	12 €	6,70 €
2 nd floor	7,80 €	4,30 €
1 st floor	4,80 €	2,50 €
stairs	+ 25 years old	- 25 years old
1 st et 2 nd floor	4,00 €	3,10 €

Children under 3 years old go for free in the Tower.

Lucas, his parents and his 14-year-old sister go to the 2nd floor of the Eiffel Tower by lift. How much will they have to pay?

Manon, her parents and her two 4-year-old and 2-year-old brothers want to go up to the 1st floor using the lift. How much will they have to pay?

Thomas, Yoan and Marie and Delphine, all 18 years old, want to go to the 2nd floor using the stairs. How much will they have to pay?