Also by G. C. Thornley

EASIER ENGLISH PRACTICE
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Easier Scientific English Practice

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LONGMANS
Thomas Edison's Inventions

LIONEL ELVIN

Lionel Elvin's book Men of America (1941) includes a chapter on the great inventor, Thomas Alva Edison (1847-1931). The piece given here is taken from this chapter. The author was born in 1905 and was educated at the universities of Cambridge and Yale. He knows America well, and his wife comes from California.

I am at the moment writing on to a typewriter, and I see by the light of an electric lamp. Across the room, tempting me to stop writing, is a gramophone; and if I don't stop to put on a record, I shall in any case stop soon to listen to the news on the wireless set at my side. Or, of course, I could go out, take an underground electric train and go to the pictures. If this were peace-time, I might go by car. If I want to make sure of a seat when I get there, I can pick up the telephone at my elbow and ask for one to be kept for me. In every single one of the actions I have mentioned, I need, in one degree or another, the work of Thomas Alva Edison.

Edison did not "invent" all these things; inventions rarely happen like that. Far more often, they are the end-result of a whole series of ideas and experiments and improvements. But one may safely say that in each of these cases Edison did something of importance to bring the instrument to me.

He did not first think of the typewriter, but he made improvements in these machines. He did make the first electric lamp which had a shining wire inside, and this enabled cities and villages to be lit by electric light. He did actually invent the phonograph (of which the gramophone is another form). He thought of the idea and he worked it out in practice.

His name is, of course, less important than Marconi's in the history of wireless telephony, but he helped in this. The first electric railway in America was built outside his laboratory at Menlo Park, in New Jersey. He invented the Edison storage battery, which helped in the development of the motor-car. And although other names may be earlier in the history of moving pictures, he helped in their development, and the first motion picture studio was built at Menlo Park.

Lastly, although Alexander Graham Bell is recognized as the inventor of the telephone (and was so recognized by Edison himself) Bell's telephone would only work over the shortest distances until Edison got to work and made possible the tremendous development of the use of the telephone that has taken place in the last fifty years.

Such truly wonderful inventions and developments earned Edison the title, "The Wizard of Menlo Park". He had done things which everyone knew were possible but difficult. More, he had done things, such as making a "talking machine" and producing a successful electric lamp, which the experts had declared to be impossible.

In the course of his working life he took out over a thousand patents in the United States for inventions of his, and it may fairly be said that he did more than any other man of his time to increase the comfort and convenience of his fellow men through the discovery of ways to use our power over nature. It is no wonder that the public at last began to believe him capable of anything.

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1 Tremendous: Very great; enormous.
2 Wizard: Man of magic. (The feminine is witch.)
3 Patent: Official right to have all the profits of an invention.
Perhaps the two pleasantest stories are those told by Mr. G. S. Bryan. The journalists, of course, were always visiting Edison's laboratory at Menlo Park for news, but sometimes they were disappointed. One young journalist failed to find any official information but was determined not to return without a story. He announced that Edison's latest invention was a kind of shirt. This did not need washing. The shirt was made in three hundred and sixty-five very thin layers; and if you wanted a clean shirt every morning, all you did was carefully tear off the top layer, and there was a clean shirt! It is said that quite a lot of people believed this story!

The second story goes a little deeper. Mr. Bryan was mentioning to a good citizen the great admiration in which Edison was held. He got the reply, "And why not? Didn't he set the whole world going?"

**EXERCISES**

**COMPREHENSION**

1. Why does the gramophone tempt the author to stop writing?
2. Mention four machines or instruments that the author has in his room.
3. Are inventions usually made suddenly, or after a lot of experiment?
4. Who made the first electric lamp of the sort we use at home?
5. To whom do we owe our gramophones?
6. Why is Marconi famous?
7. What did Alexander Graham Bell invent?
8. Why do you think the telephone has developed so quickly?
9. Tell the story of the strange shirt. If Edison did not invent it, why was it described?
10. Why did some people think that Edison set the whole world going?

**THOMAS EDISON'S INVENTIONS**

**LANGUAGE**

1. Fill each of the spaces with one of the words from the list: typewriters; gramophone; records; wireless; telephone; inventions; capital; battery; expert; journalist.
   
   (a) Mr. Robinson has three — sets in his house, because he wants to be able to hear the news in three different rooms.
   
   (b) Peter is going to be a — and he hopes to travel to many different countries in search of news.
   
   (c) Most business letters are now written with —.
   
   (d) We are going to have a — put in our house, and so you will be able to ring me up whenever you like.
   
   (e) Tom likes music and has bought a new gramophone so that he can play his — on it.
   
   (f) Every car has a — to drive the starter and to provide current for other purposes.
   
   (g) No — are made by fat and lazy people sitting in armchairs.
   
   (h) This child can read — letters, but does not understand small letters.
   
   (i) The turntable of this — is driven by electricity, and the pick-up has a sapphire needle.
   
   (j) If you want the best advice on anything, ask an —.

2. Fill each space with a suitable preposition:
   
   (a) The author is writing — paper — a pen.
   
   (b) Let us listen — the news — the radio.
   
   (c) The book was — my elbow, but I did not pick it up.
   
   (d) The final result was reached after a series — experiments.
   
   (e) Many new ideas were used — the development — the motor-car.
   
   (f) Things which seem easy in theory are often difficult — practice.
   
   (g) Great progress has occurred — the last fifty years.
   
   (h) Edison invented many things — the course — his life.
   
   (i) Edison was held — great admiration.
   
   (j) Friese-Greene's name is famous — the history of moving pictures.
EASIER SCIENTIFIC ENGLISH PRACTICE

3. If this were peace-time (but it is not), I might (or would) go by car.

The use of the past tense (were) after if when we mean NOW shows that we are supposing something which is not true. It was not peace-time when the author wrote, because as (you can see in the introduction) he wrote in 1941, and the 1939 war ended in 1945.

Were is used instead of Was because it is better to use the past tense subjunctive when we are not stating a fact. (It is not peace-time.)

Put the right tenses of the verbs below. If you need the past tense of the verb to be after IF, use Were. In all the sentences you need a past + would/should or might:

(a) If Peter (be) a millionaire, he (pay) for my education.
(b) If the earth (be) made of gold, no one (want) gold.
(c) My house is in England. But if it (be) in Syria, I (see) the sun more often.
(d) His car is a Mostyn. But if it (be) a Rolls-Royce, he (feel) very proud.
(e) The trees in the garden are very small. I (feel) happier if they (be) taller.

4. This enabled cities to be lit by electric light.

Notice enable, a verb made from able by adding the prefix en-. Form verbs from the following:

(a) force; (b) trust; (c) circle; (d) large; (e) slave.

Put the past tense of one of your verbs in each space:

(f) They — the building so as to make room for the new classrooms.
(g) In the past some men — others and carried them off to work on plantations.
(h) When the new street was made, and the police — the law, many motorists grew angry and shouted.
(i) The piece of ground was levelled, and the workmen — it with a wooden fence.
(j) The foolish boy — all his money to a stranger.

THE PLANET MERCURY

5. Form nouns from the following words. All the nouns occur in the passage:

(a) admire; (b) important; (c) act; (d) practise; (e) discover;
(f) inform; (g) improve; (h) invent; (i) convenient;
(j) develop.

6. Make the following interrogative:

(a) He did not set the whole world going.
(b) This needed washing.
(c) I might go by car.
(d) I shall stop soon to listen to the news.
(e) He thought of the idea.