

An Electric Villa.

BY FREDERIC LEES.

[The curious incidents related in the following article were experienced by the author during a recent visit to the house of a French inventor at Troyes. Though his narrative reads for all the world like a chapter in a scientific romance, everything related in this plain tale of the events that occurred at the wonderful "Villa Féria Electra" is perfectly true—as, indeed, the photographs sufficiently prove.]



PROPOSAL to spend a few days with such a host as Georgia Knap is not one of those invitations that you disdainfully decline. He has long since gained a reputation for being a model Amphitryon and a prince of good fellows to boot. On the arrival of his letter by the afternoon post, asking me to visit him in his new house, I had not a moment's hesitation, therefore, in telegraphing consent and in packing my port-manteau. Three o'clock found me sitting in the Troyes express, and as it swept along my thoughts continued to dwell on the decidedly mysterious wording of the invitation from my inventive friend. "When we have finished this house-warming," he wrote, "I warrant that you and others will marvel at what you have seen." Evidently some surprise was in store for us, but as to its nature I could not think of the slightest clue.

Night had already fallen when the train reached the ancient town of Troyes, so I lost no time in finding my way to No. 14, Rue Pierre Gauthier. A gas-lamp on the opposite side of the road lit up the marble plaque bearing the name of the house, "Villa Féria Electra," and showed me that I was not mistaken. But how to open the stout iron gate was a puzzle, for there was no sign of a knob anywhere. At last, after a vain

search for a means of entrance, I espied an electric bell-push and rang. Instantly, and as though I myself had been the cause, a vivid shaft of light shot from a dark avenue and fell full upon my face through an opening in the ironwork. I moved a little to the left, out of the way of the glare, but the search-light, directed by some invisible hand, moved too, and continued to follow me with

annoying persistence whichsoever way I dodged. Almost at the same moment a clear voice rang out from the darkness, on the right, causing me to start back involuntarily.

"Who's there?" it said, in a commanding tone.

But before I had had time to recover from my astonishment and reply, it continued, now distinctly amiable:—

"Oh, so it's you, *mon ami*? I can see you now. Didn't recognise you at first. Your image in the periscope is a little blurred this evening, owing to moisture on the

mirrors; but I can make you out all the same. One moment, whilst I open the gate."

The final sentence was punctuated by the sharp metallic click of a bolt; the sound of machinery in motion came from somewhere behind the mysterious entrance, and the gate slowly swung open. Entering the avenue, I was about to push the gate to when the voice once more sounded at my very elbow.

"All right! No need to touch it. Allow me, please. And now come along to the



THE EXTERIOR OF THE ELECTRIC VILLA.
From a Photo. by Laurence & Co., Paris.



THE GATES OF THE VILLA—HERE A SEARCH-LIGHT SHINES UPON THE VISITOR, THE VOICE OF THE OWNER WELCOMES HIM FROM THE DISTANT HOUSE, AND THE GATES FLY OPEN.

From a Photo. by Laurence & Co., Paris.

house. Straight down the avenue and turn to the right when you get to the bottom. But I'll light up for you. There! That's better!"

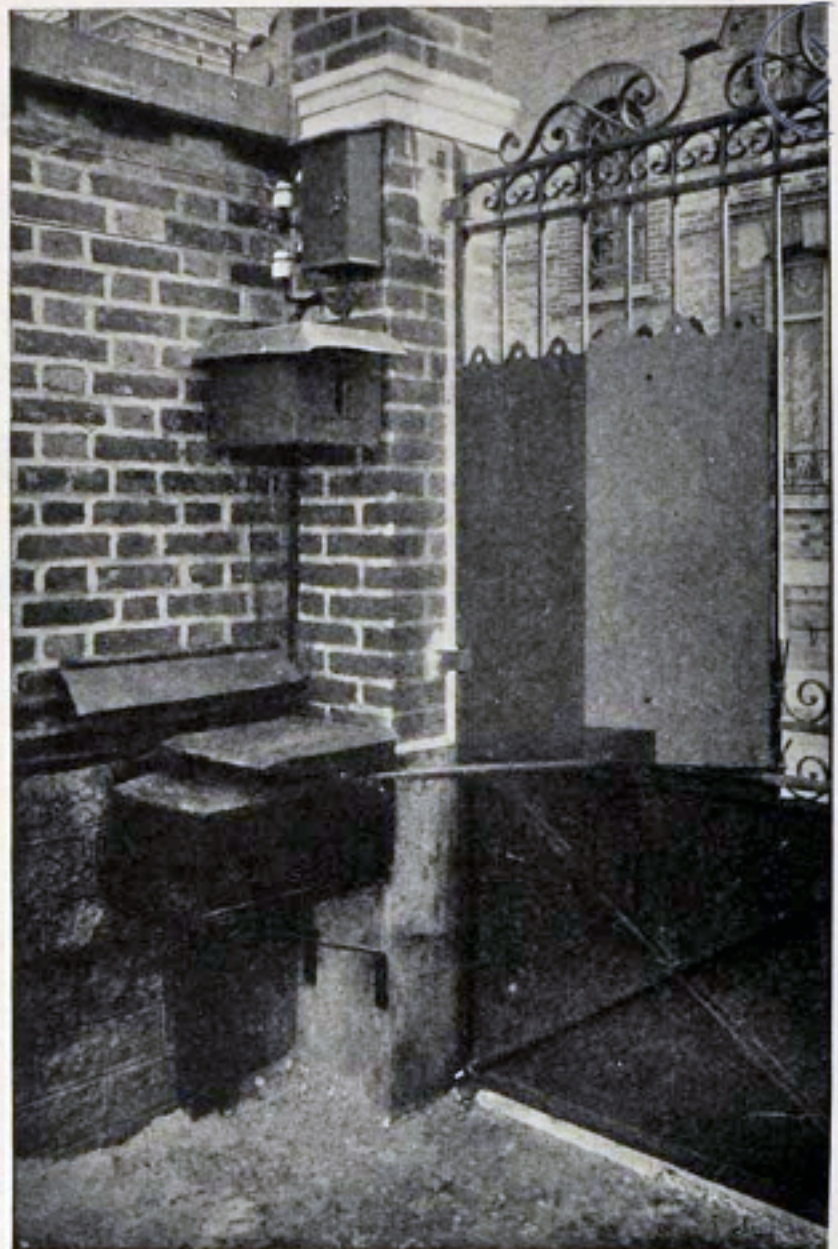
A flood of light was projected down the snow-strewn path for a distance of some two hundred yards, making it as easy to find the way as though I had been in the full light of day. On reaching the front door of the villa, and before I had even thought of looking for bell or knocker, it flew open, almost noiselessly, and the same voice, which I now recognised as that of *Géorgia Knap*, gave me welcome to his new home.

"Soyez le bienvenu à la Villa Féria Electra! Step in, please; and when you've hung your hat and coat in the ante-chamber come upstairs to my study. Door on the left when you reach the first landing."

Stepping on to the mat, I immediately experienced a curious sensation on the soles of my feet. It reminded me partly of the feeling of instability that you have when travelling for the first time on the moving staircase of a certain big Parisian shop; partly of the gentle friction of a friendly cat when, with arched back and a purr, it caresses your trousers leg. As the door closed of its own accord, I glanced downwards and discovered the cause of the peculiar feeling. Within a

framework of steel bars, numbering from twenty to thirty and about an inch and a half apart the one from the other, the bristles of an endless brush were passing with incredible swiftness, removing every particle of dirt from my boots. This was indeed a house of wonders! Was it worked throughout by machinery, at the touch of an electric button? And with this question on the tip of my tongue I hastened to my host's sanctum, determined to solve the mystery. As I opened the door—a little surprised that it did not save me the trouble—*Géorgia Knap* rose from his chair and advanced towards me with extended hand.

"Well, *mon cher*, what do you think of my new house? And that is only a specimen of what I have to show you. But allow me to introduce you to my friends here, to whom I was just explaining my ideas on the homes of the future."



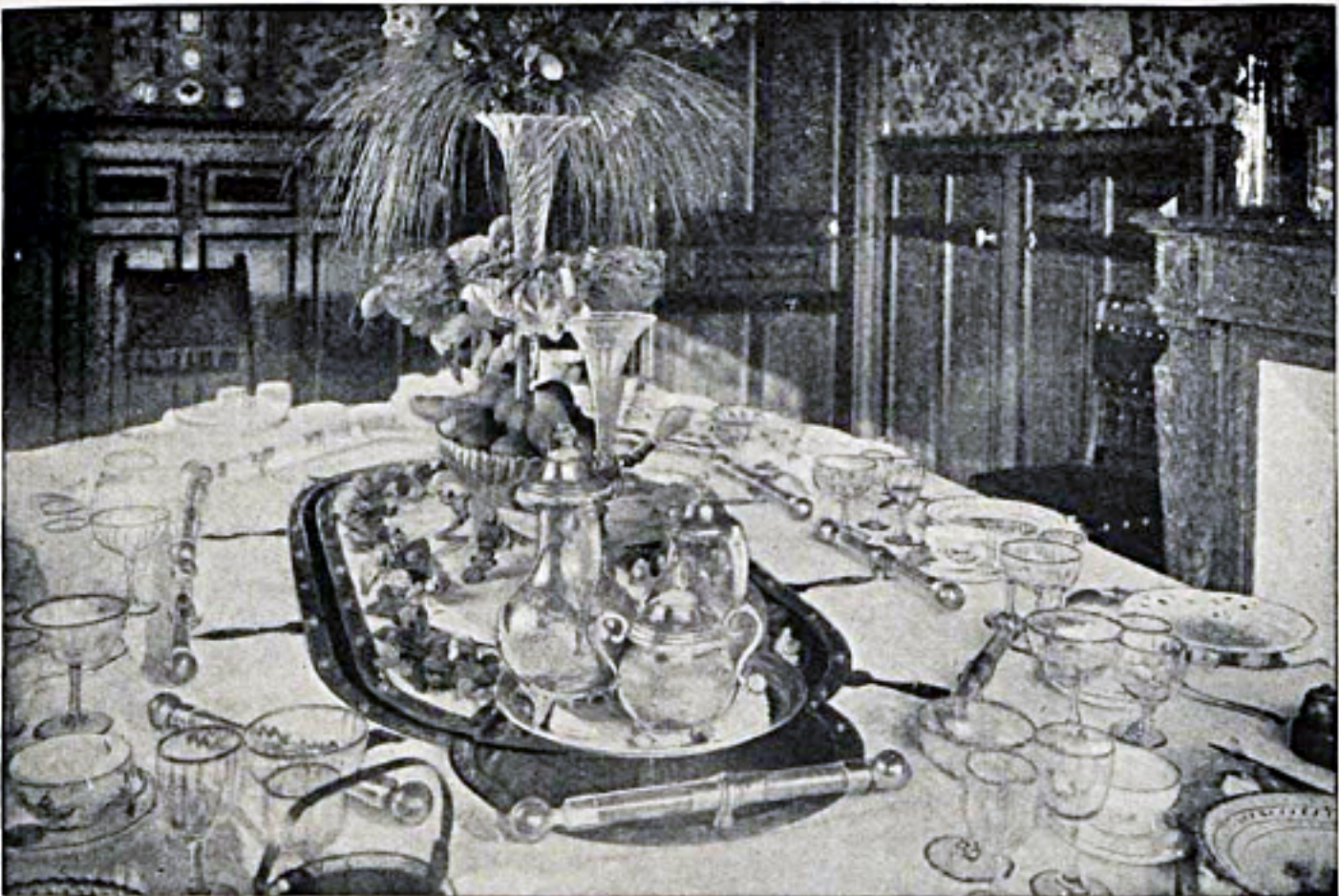
THE APPARATUS INSIDE THE GATES BY WHICH THE ABOVE-MENTIONED WONDERS ARE ACHIEVED.

From a Photo. by Laurence & Co., Paris.

After I had been presented to the select little company that had gathered to celebrate this novel house-warming, Gœorgia Knap continued to discourse on the marvels of mechanism with which houses will be provided when electrical science has advanced but a few steps farther. He had been fifteen years, he said, in perfecting the wonderful machines that were around us on all sides. But it was always the start that was difficult in these matters, and progress would now be made by leaps and bounds. There was hardly a thing that was now done by hand but would be done by machinery in fifty, twenty, nay, perhaps in ten years' time. Electricity would, of course, be the motive force.

a crystal epergne holding flowers and fruit, and with a garland of imitation Parma violets, was enclosed by an elliptical band of metal, in which was a deep groove, like a miniature tramway-line. At one end of the ellipse—that opposite which our host was sitting—was a circular disc, likewise traversed by the groove. Opposite each guest was a sort of glass and metal cylinder, the utility of which we did not at first discover. Finally, at our host's right hand were a number of electric buttons, which, he began by explaining, were to play an important part during the whole of the dinner.

"These little black and white buttons," he said, "will enable us to dispense with the



THE DINING-ROOM TABLE, ON WHICH THE WHOLE DINNER IS SERVED ENTIRELY BY MACHINERY, NO SERVANTS BEING PRESENT.
From a Photo. by Laurence & Co., Paris.

It would be as easy to satisfy one's slightest wish in the electric houses of the future as it was now to produce light or heat by turning a switch; as easy to have one's coffee and roll, for instance, brought by machinery to one's bedside in the morning as it was to touch that button at his elbow and signal to the kitchen that dinner could be served.

There were twelve of us to dinner that evening—the exact number to fill every seat at the table; and as we took our seats there was not one of us, save Gœorgia Knap himself, who failed to be astonished at what he saw before him. For this table, which I must describe in detail, was evidently no ordinary one. The centre, ornamented with

presence of servants. From the first course to the last, *mes amis*, neither maid nor man will enter the room. Yet I warrant you will have no reason to complain of the manner in which your needs are satisfied. But suppose we have a little more light on the scene, and a little warmth, too, for the temperature, if I am not greatly mistaken, has fallen."

The turn of some hidden switch transformed the table, which was already well illuminated, into a marvellous source of multi-coloured light. The chrysanthemums, roses, and tulips in the epergne, the garland of violets, and the little cylinders of glass and metal suddenly became incandescent. The last-named, we found, were electric heat

radiators. These, our host explained, would quickly increase the warmth of the room, and if, in spite of that, our feet were cold, all we had got to do was to place them on the electric foot-warmers, which were under the table opposite each chair.

Before we had recovered from the surprise caused by this sudden flood of light and heat, a still more astounding thing occurred. The two sections of the disc opposite Georgia Knap rapidly opened, a tureen of soup on a tray appeared through the opening, and, on the sections closing, promptly and noiselessly travelled towards the seat of honour. The ladle being rather awkwardly placed, a guest leaned forward. But he might have saved himself the trouble, for that intelligent soup tureen had evidently read his thoughts, since it swung round and placed the handle of the ladle within easy reach of his hand. When he had taken what soup he wanted the tureen passed on to the next guest, and so on until a complete circuit of the table had been made. Then, after inviting everybody to partake of its delicious julienne for a second time, it disappeared as magically as it had appeared.

The next course rose through the table, went on its rounds, and then vanished in a similar way.

So with the *rôti*, the *entremets*, the cheese, and the *café noir*. Our dirty plates and napkins, placed in a special receptacle, were carried off with a celerity that no attendant, however willing or well-trained, could have equalled.

At the conclusion of the meal we guests were all so curious to know how it had all been done that it was almost with one voice that we asked our host to explain the mystery.

"Patience, *mes amis!* When we have finished our cigars and cigarettes we will descend to the kitchens, where all things will be made clear to you. Meanwhile, let us leisurely sip our liqueurs and enjoy the refreshing breeze with which the room—a

little too hot, to my fancy—will soon be ventilated. I may tell you that that will be done automatically when the temperature reaches seventy degrees, and I see that the thermometer is nearly at that now."

Even as he spoke a gentle breeze, scented by its passage over perfumed water, was wafted into the room. How much better a method of ventilation was this, I thought, than the old plan of opening doors or windows, with their inevitable draughts and bad colds! And it was done, too, automatically by that little electric ventilating apparatus hanging on the wall—another of the inventions of that mechanical genius, Georgia Knap.

In the offices, situated beneath the dining-room, our host pointed out and explained the various electrical apparatus with which he has fitted up his wonderful house.

"Here," he said, indicating a machine that reached from floor to ceiling "is the lift by means of which our dinner was placed on the electric table. On receiving a signal from the dining-room that a fresh course is wanted, the *chef's* assistant places it on this tray, turns on the current by means of these levers, and sends it off on its journey through the ceiling.

Once it has arrived, I can direct its movements to any part of the table by pressing one or other of the black and white buttons. This cooking-range on our left was responsible for the cooking of those fowls which you did me the honour of saying were done to a turn. The heat used is, of course, electrical. No dirt or bad cooking to be feared with such a range as this. Look at this little apparatus for timing the cooking of a joint. You set the needle thus, and when the hour or so is up the current is cut off automatically, and a bell rings to inform the cook that he can take out the meat and prepare it for table. Here, again, we have a number of other useful kitchen machines, all worked by electricity.



M. GEORGIA KNAP, THE INVENTOR OF THE ELECTRIC VILLA.
From a Photo. by Laurence & Co., Paris.

This small motor, one-tenth horse-power, can be made to grind the coffee, to mince meat, to make butter in this miniature churn, to prepare the *mayonnaise* sauce, or to polish the knives, and at a cost which is ridiculously small—at the rate of about one halfpenny an hour. For I must tell you that the whole of the electrical apparatus in my house is worked by a continuous current of only twenty-eight to thirty volts. With this very low voltage we work our washing-machines, the electric doors, the table and its lift, the ventilating and fire-alarm apparatus, these small machines here, and other minor apparatus. But let me show you my means of controlling the gate at the entrance—a feat that many of the people of Troyes, who stand sometimes in little crowds in the street yonder to watch the gate open and shut, have not yet been able to understand. At the top right-hand corner of this plaque you see a bell, the ringing of which tells me

that there is a visitor. With the receiver to my ear, I ask who is there, and if I don't happen to get a reply I glance out of the window to my left on to the large and slightly convex mirror of the periscope, which, by reason of its relative position to other mirrors, enables me to see right out into the road. Yes; the telephone is a loud-speaking one, and the microphone at the

gate is so sensitive that a person replying to me in quite a low tone of voice can be heard by me quite distinctly. Indeed, I can plainly hear people and carts as they go by in the Rue Pierre Gauthier. The gate I can open and shut by turning this pointer either to the right or the left. Finally, this iron mask, with wide-open eyes and mouth, is another means of knowing what is going on at the entrance two hundred yards away. When there is a visitor white discs appear in the eyes; when letters are dropped into the box a white label appears in the mouth."

As I bade my host "*bonne nuit*" I fancied that he must

surely have told us everything about his inventions. But in so thinking I was greatly mistaken, for on reaching my bedroom I found that it contained all sorts of time-saving and comfort-giving electrical apparatus, including one very ingenious appliance for drawing and opening the curtains by merely turning a couple of switches at the bed-head.

"I invented that little thing," said Georgia Knap at lunch the next day, "whilst lying in bed one winter morning, after pulling the cur-

tains aside in the old way, and finding it was not yet light. It struck me that it would be convenient to have some means of opening and closing them without getting out of the blankets, especially in cold weather, so I set my wits to work to solve the problem. Mechanical problems are my delight; and I verily believe that even in my sleep my brain is often at work on the tasks I have set myself."



THE KITCHEN, WITH THE ELECTRIC LIFT TO CARRY THE DISHES TO THE DINING-ROOM, THE RANGE, WHICH RINGS A BELL WHEN THE JOINT IS SUFFICIENTLY COOKED, AND MANY OTHER REMARKABLE DEVICES.

From a Photo. by Laurence & Co., Paris.