

The Mushroom Caves of Paris.

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From Photographs specially taken by George Newnes, Ltd.



HE Paris of the pavement, gay, bright, and exhilarating, is fairly familiar to us all, but underground Paris, dark, solitary, and damp, extending for miles, is comparatively unknown. A part of this area is devoted to the catacombs—a valley of dry bones, a garden of the dead; the rest, a garden still more vast, provides for the wants, or rather the luxuries, of the living—it is devoted to mushroom culture.

These subterranean gardens extend for some twenty miles under the gay capital, and are from 20ft. to 160ft. beneath the surface. It is very difficult to obtain permission to visit them, and even when permission is obtained it requires some courage to avail oneself of it, for the only entrance is a circular opening like the mouth of a well, out of which a long pole stands; through this pole, fastened at the top only, at fairly long intervals, sticks are thrust. This primitive ladder, the base of which swings like a pendulum in the impenetrable darkness below, is the only means of reaching the caves.

The Champignoniste who, for a consideration and after considerable hesitation, finally agreed to show us over his cave-garden

encouraged us by relating that once a proprietor got lost in his own cave and was not discovered for three days, although soldier volunteers were sent in search of him. We also recalled the recent murder of a bank cashier and the concealment and cremation of his body in the kiln of one of these caves.

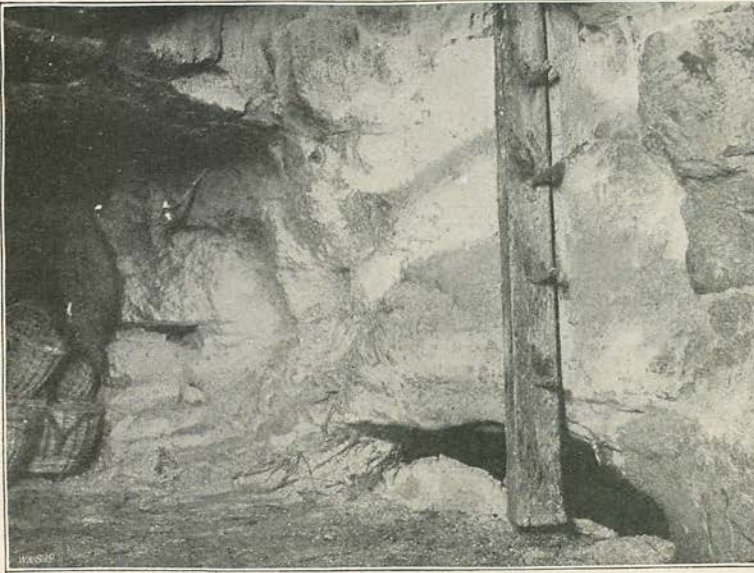
As I am of an extremely unselfish nature, I insisted that my collaborateur should have the glory of going down first. I watched

his downward course—this is human nature—with considerable interest, but instead of the “all right” which was to signal his reaching *terra firma* I thought I caught the echo of an ejaculation, concise, loud, and firm, but in a language that was unknown to me. That was immaterial; it proved that he had reached ground somewhere and still lived. It also proved that, although language was meant to conceal thought, there were times when it sufficed to express it clearly and emphatically.

Slowly and with many fears—for my companion—I descended that shaft in Cimmerian gloom, and found myself plunged ankle-deep in mud, and the “foreign language” became familiar to me for the moment. “This is but the first platform,” said our guide. “You have to descend two more yet, if you wish to see the whole.” To



ENTRANCE TO THE CAVES—PROPRIETOR GOING DOWN.



BOTTOM OF THE SHAFT.

receive information and instruction while reclining on a mushroom bed, in a place where you can't sit up, much less stand, is not one's idea of the pleasures of a journalistic career.

The culture of the mushroom, although now carried on all over France, originated in Paris, and there it has been brought to such a state of perfection that it forms an important industry.

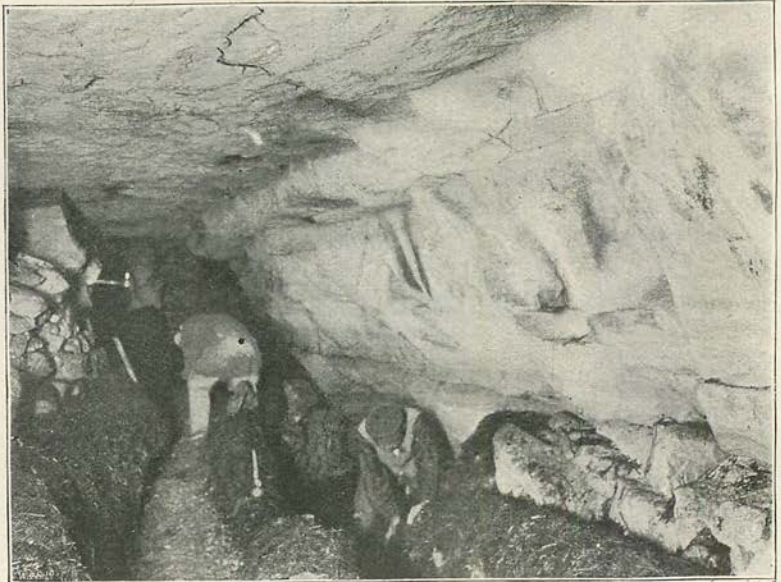
Disused stone quarries are utilized for these mushroom gardens, the interiors of which may be compared to vast rock temples, with galleries radiating in every direction. These caves are divided among different owners, and are under Government supervision and are periodically inspected. These inspections do not really amount to much, for only the owners themselves are familiar with the winding passages, and without their

direction and guidance no supervision would be possible.

Among the ancients, who well understood the use of hot-beds, there were three methods of cultivating this delicacy. The first consisted in frequently watering the stump of a fig-tree well covered with manure; second, in watering the stump of a black poplar with wine and water; third, in frequently watering the soil with water in which laurel leaves

had been boiled. These methods could not, of course, propagate mushrooms of themselves, but would facilitate their propagation.

Mushroom-growing is very expensive at first to the cultivators. The most perfect cleanliness has to be observed near the beds, which are about 22in. high and about the same in diameter; they are covered over with silver sand and a whitish clay, and run in parallel lines, with only a narrow path between



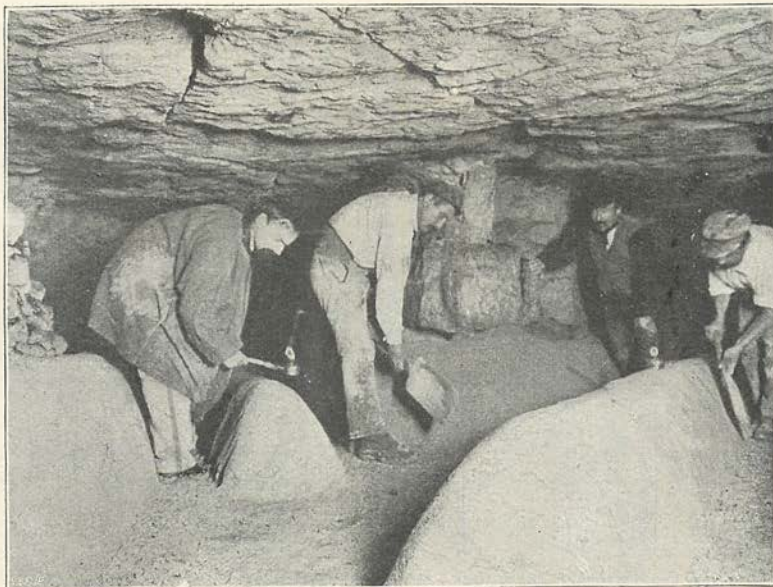
PREPARING BEDS—FIRST STAGE.

Mushroom farmers contract and pay so much per month for the manure of the horses of Paris. This has to be carted to the station and loaded, and perhaps carted a couple of miles afterwards to the quarries. There it is made into flat heaps near the entrance to the shaft, and turned over and well mixed and watered for about five or six weeks, or, in some cases, only three weeks, before the necessary fermentation takes place. When the manure (in which virgin spawn exists naturally) is sufficiently prepared it is

happened about twenty times, and a good deal of valuable time was lost in relighting them.

A poor, innocent photographer had been enticed to accompany us, and his miseries, loaded as he was with his impedimenta, reconciled us to *our* troubles.

An important item in mushroom culture is fresh air, and the farmer must know exactly how much oxygen is needed for the respiration of the fungi. Air holes are bored here and there, beneath which, in many



PREPARING BEDS—SECOND STAGE.

shot down through one of the shafts into the caves.

Here we will return to our landing on the first gallery of the mushroom garden. Our friendly farmer and guide had, before our subterranean travels commenced, divested us of our outer garments and enveloped us in the familiar blue blouse of the French *ouvrier*; had he added sabots to the outfit he would indeed have been a benefactor, for alas! the mud in which we landed was largely composed of lime. Our well-fitting shoes—too well-fitting for comfort—which, when we started, were things of beauty and of torture, were wrecks for ever.

Our guide broke in upon our audible reveries by handing us each a small candle fixed on a thick stick. We had not advanced ten steps before the candles were blown out by the wind, and we congratulated ourselves upon not being bank cashiers. This accident

places, coke fires are lit, which consume 5cwt. of coke every twenty-four hours; this ensures the necessary renewal of fresh air. Temperature and moisture have also to be studied, necessitating partitions of straw laid between laths of wood, and many doors to regulate the current of air in these labyrinthine passages.

"Be careful! Bend your head!" calls our guide—of course too late. We answered him briefly, and in English, from a sitting position, our eyes seeing ten candles where only one was before. The photographer—but I will spare his feelings—he indulged in a curious monologue for about ten minutes, and, like the photographer made famous in Lewis Carroll's poem, "stated that he wouldn't stand it, stated, in emphatic language, *what* he'd be before he'd stand it."

The narrow galleries now become so low

that we have to creep along almost doubled up, in order to inspect the beds where the mysterious process of propagation is taking place.

The discomfort we endured while traversing this section, and the groans of the photographer, induced us to interrogate our guide rather sharply as to his knowing the way out of this "Inferno."

"Indeed," he replied, "it is absolutely necessary for us to know every inch of the ground. I have been in these quarries since 1867, and I could walk with you round this cavern for three days without reaching the end." We shivered; it was the cold, I think; but we were none of us eager to test this knowledge of his. There are people and occasions when expressed doubt is out of place.

"During the late war," our host continued, "you could have promenaded these quarries, and covered a distance greater than from Chatillon to Paris, but on roads."

We, with considerable difficulty, and in the wake of labourers who have to lie flat on their barrows while pushing them along, reach a large hall hewn out of the rock by the former tenants—the quarrymen.

"Follow me!" calls out the guide—as if we intended losing sight of him for a moment—"and see how the beds which are to receive the spawn are prepared."

After the manure has arrived down the shaft, as before described, the underground gardeners form it into beds $1\frac{1}{2}$ ft. wide and high, and arranged in rows, this being the condition experience has proved best adapted to bring the manure up to the average temperature of from 15deg. to 20deg. Centigrade, necessary for the fructification of the fungi.

To construct these beds evenly an interesting method is adopted; each workman sits astride his bed, as if on horseback, fills his arms with the manure, and presses it down be-

tween his legs, and thus they move along the beds with the jolting motion of a rider. In this manner the beds are regularly and evenly arranged and pressed like so many furrows.

When the beds attain the proper temperature the spawn is sown. Small beds are devoted to the propagation of virgin spawn, which is much more valuable than the spawn which is found abundantly in the old beds; this is never really used directly, but is employed to spawn a small bed when the virgin spawn is unobtainable.

From the time of the first preparation of the manure to the gathering of the harvest three months or so elapse. All the expenses connected therewith amount, for each 4ft. of ground, to three francs, and a profit is



BEGINNING TO SPROUT.

only realized when this space yields more than four kilos of mushrooms. The price of a kilo at the Central Market in Paris is about one franc.

A mushroom-grower has to contend against rats and parasites of various kinds. As a remedy against the first evil, cats are kept in these cloisters; but sometimes they catch their prey but do not eat it, and the mushrooms suffer from the decay of organic matter. Among the parasites, a cryptogamic, rejoicing in the name of *mycogone rosea*, which penetrates into the pores of the fungi, causes a loss estimated at not less than £40,000 per annum in the Parisian caves alone.

The smallest particle of iron in the beds of

manure is avoided by the spawn; coal has also the same effect, a large circle round the obnoxious object remaining barren. A spiteful employé wishing to injure his master need only stick a rusty nail here and there in the beds, and a very serious loss of crops will result.

The beds look very pretty when in full bearing, the less advanced ones being dotted over with little white buttons about the size of peas, other beds where the dazzlingly white produce is ready for gathering, about 400lbs. being sent every day to market. They are gathered roots and all; the beds remain in bearing from two to six months.

Besides supplying the markets of Paris, hundreds of pounds' weight are exported, and large quantities preserved. One grower alone sends 14,000 boxes of preserved mushrooms to England annually. The total value of the mushrooms sold in the Halles Centrales, exported or preserved, amounts to £280,000 per annum. One thousand to 1,200 workmen are employed in the suburban caves which lie between Meudon and Ivry. There the ground has been so excavated that the galleries run into and above each other, their length in one cave only being said to be no less than five miles.

Our mushroom-grower, probably with the friendly intention of repressing undue curiosity, and also of further adding to the miseries of our photographer, lapsed into horrors the moment we reached a place where we could walk and not creep.

"You can understand now," he said, "if this murderer—who is, fortunately, not a Frenchman—has buried the body of the cashier, as some think, instead of burning it, it would be very *difficult* to find it again, although his quarry is much smaller than mine." We were not interested in that subject.

"Here," again cried our guide, with a burst of cheerfulness. "See this door! On the other side are the catacombs—as full of bones as this place is of mushrooms." We smiled; we were not afraid of bones with an iron door between them and us.

Our subterranean travels were now over, and, as we ascended, our farmer had one more sensation for us. Pointing out a tablet let into the wall, with "13 V., 1871" inscribed on it, he said, "Here are buried the thirteen *Fédérés* who were shot in 1871; the figures and letter mean 'Treize Victimes, 1871.'"



WATERING AND GATHERING.