For murderers there is only one kind of mushroom worth considering: *Amanita phalloides*. Almost everyone who dies from mushrooms dies from it; and most of those who have eaten it have died from it. Even a small piece of the cap may kill a grown man. Specimens are easy to identify and easy to find in season—in our latitude from August into October. Their poisonous virtue survives cooking, freezing, drying. To speak more accurately, the deadly species are three in number, for we must add *Amanita verna* and *Amanita virosa*, but all three resemble each other so closely both in appearance and toxic properties that the murderer, whose ends after all are empirical, will disregard the distinctions as academic. He looks for white gills, veil (or ring), and volva, taking care not to be misled by any of the innocent amanitas, such as the citrina. On the autopsy table the victim shows pathological lesions of the viscera, but unlike the case with arsenic, the pathologist cannot iso-
late the lethal agent, whose identity he must infer from the case history supplied by the attending physician, plus such evidence as can be assembled to show that the victim had eaten the lethal fungi.

From the murderer's point of view, the deadly amanita suffers from one shortcoming: an occasional victim, after days or weeks or even months of shattering illness, slowly recovers and returns to circulation. True, he is only a frail replica of his former self, but he is alive and has foiled the murderer's coup. On the other hand, if the murderer also hates his victim, and if success attends his undertaking, his worst instincts and hopes will have been more than satisfied by the slow progress and horrible suffering that attend the victim's downward course into the grave. The symptoms of poisoning by the deadly amanitas are distinctive, dramatic, and terrifying.

To begin with, the lethal amanitas taste good—on this the abundant testimony of victims shows no dissenting voice. Nothing arouses suspicion as the greedy diner consumes his fateful dish; nor does he suspect anything for many hours thereafter. Indeed, the distinctive mark of this poison, its véritable signature as Dr. Dujarric de la Rivière has aptly called it, is the period of absolute quiescence that follows the ingestion of the mushrooms, a period that never lasts less than six hours, and usually ten or twelve, sometimes twenty or even forty or more. The victim goes about his affairs blissfully unaware that the fingers of death are entwining him. Perhaps he speaks with relish of the mushrooms he has eaten, and may ask for another helping of the same kind at the next meal. If they have been served to him intentionally, his murderer, standing by, eyes him with wicked and dissembled solicitude, alert for the inevitable moment. Of a sudden the victim is gripped by appalling abdominal distress, followed by vomiting and diarrhoea foetida. Neither
emetics nor purgatives can help him now, for his system has absorbed the venom during the long period of silent invasion. The initial seizure is followed by utter prostration, which in turn is succeeded by another paroxysm like the first, and this alternation continues, perhaps for many days, until the victim, his pulse fast and weak, succumbs, usually after a delirious phase. The appearance of the patient meanwhile is marked by what the physicians describe as the Hippocratic facies—eyes sunken and staring as though with anxiety or terror, skin over the cheekbones taut and parched, nose pinched, temples hollow, ears leaden and cold, their lobes turned out, lips relaxed, the whole face livid—an appearance that is clear harbinger of imminent dissolution.

Our lugubrious, even sinister, approach to the toxic fungi presents the elementary facts that should be known to any detective story craftsman who resorts to mushroom poison as a device in the construction of a plot. The art of the detective story is a minor literary genre proliferated by the English-speaking peoples. Its leading exponents are often conscientious in their scientific research. But when they invoke mushroom poisoning, they seem incapable of artistic performance, as though the mycophobia peculiar to the Celtic and Anglo-Saxon races inhibited all inquiry into the dark recesses of the repellent subject. Mushrooms remain a mystery to mystery writers.

Before examining the texts, we must mention two other kinds of toxic mushrooms. First and foremost there is Amanita muscaria, erroneously regarded by many laymen as preeminently the poisonous mushroom. Its evil reputation far outruns its deserts. It gives its name to 'muscarine', the agent that most physicians and many medical examiners in the English-speaking world regard as synonymous with mushroom poisoning. But
the facts are that muscarine is seldom if ever fatal, that it is destroyed by cooking, and that it exists in *A. muscaria* only in traces. One would have to eat kilograms of fresh *A. muscaria* to induce a muscarine reaction, and far more for a lethal dose. In the English-speaking world this spectacular mushroom labors under a tabu, originally I believe religious, which wielded such power that it seeped out and infected the whole wild mushroom world—the world of ‘toadstools’—to the point where the idea of eating them strikes panic into the normal Englishman’s being, be he ever so brave. The victim (or beneficiary) of *A. muscaria*, following a stupor accompanied perhaps by vivid dreams, is traditionally imbued with a sense of exhilaration, of living in new dimensions with miraculous mobility; but these are the result of drugs new to science and now for the first time being studied.

Of the remaining toxic mushrooms, there is a peculiar mystery about *Gyromitra esculenta*, a common species much eaten (as its name suggests) in central Europe. Certain it is that at intervals cases occur where an individual dies from this species. The explanation may not be surely known, but if the best opinion available today proves right, *Gyromitra esculenta* offers us a notable fungal peculiarity. It seems that everyone may eat this tasty mushroom with impunity for the first time. But occasionally there is an individual who, if he returns to a mess of the same species shortly thereafter, and if the mushrooms are fresh rather than dried, suffers a dangerous or even fatal anaphylactic shock.

Dorothy L. Sayers with Robert Eustace in *The Documents in the Case* produced the supreme example in English of a mystery story based on fungal poisoning. An eccentric Englishman, George Harrison, made wild mushrooms his hobby (he was obviously eccentric), and
in the end was found dead (as his fellow-countrymen would expect) in a lonely shack. The evidence indicated that he had recently eaten a mess of stewed mushrooms prepared by himself. The coroner after chemical analysis of the uneaten remains of the stew put the death down to accidental muscarine poisoning. The victim’s son, Paul, was not satisfied, because he was certain his father, a careful man and excellent amateur mycologist, could never have confused *Amanita muscaria* with an edible species, and in the end he ran down the real culprit, a lover of Paul’s stepmother, a villain named Robert Lathom, who in due course was proved to have introduced synthetic muscarine into the stock that had served for the mushroom stew. He was tried, convicted, and hanged. The story is well told, with delightful touches revealing the mycophobic habits of mind of the run of Englishmen. But it suffers from one defect: muscarine is destroyed by cooking and could not have caused the victim’s death. Furthermore, the toxicity of fresh muscarine is exaggerated: the chances were excellent that Harrison would survive an uncooked dose. Lathom should have used pieces of *A. phalloides*, not muscarine, and for informed readers, his execution was a painful miscarriage of justice, a tragic sequel to an incompetent performance by Defense Counsel.

Miss Sayers and Mr. Eustace used, or misused, a genuine mushroom. More often English authors create fictional species, tailored to fit their plots. Ernest Bramah in *The Eyes of Max Carrados* tells a story entitled ‘The Mystery of the Poisoned Dish of Mushrooms’. It hinges on the peculiar properties of a non-existent fungus on which he bestows a name unknown to mycology, *Amanita bhuroides*. (This name sounds like a misspelled derivative of Burrhus, a personage in attendance at the imperial court of Claudius and Nero.) It is so deadly
that the victim expires within a half-hour of his seizure. More notable than *Amanita bhuroides* is the fictitious "*Panaeolus sherriffoides*", as we shall call the mushroom that the playwright R.C. Sherriff devises for his drama *Miss Mabel*. His plot is unhappy, for we are expected to sympathize with a kindly, somewhat demented heroine who poisons her wealthy and hateful sister, the widow Fletcher. The mycophile watches with astonishment as the author, by a very act of creation, invents his mushroom and clothes it with precisely those attributes that the plot requires. It appears in the spring: the daffodils are in bloom and Easter is yet to come. (In nature there are almost no mushrooms then.) It grows fast, progressing noticeably in the course of a night's rain. A cluster of nine serves as the lethal dose, but the playwright suggests that fewer would have sufficed. When cooked, the mushrooms smell like hot rubber, but the smell is successfully overlaid with onions and tomatoes. Most remarkable are the toxic properties. These fungi are a powerful narcotic and put the victim to sleep at once. The widow Fletcher departs this life without pain, her ugly, resentful face assuming in death 'a look of such peace and gentleness' that the audience is presumably reconciled to her hurried departure at the hands of her sister.

Yet another inventor of mushrooms is H.G. Wells in his short story, *The Purple Pileus*. Here a mild-mannered, milk-toast of a man named Coombes, lower middle-class, finds himself browbeaten by his wife and her odious friend, Clarence, to the point of desperation and suicide. He rushes from the house into the woods. He thinks of drowning himself, but suddenly notices all the varied mushrooms around his feet. A purple pileus catches his eye, 'a peculiarly poisonous looking purple', slimy, shining, emitting a sour odor but not disgusting.
Coombes breaks off a piece, and the creamy white of the inside changes in ten seconds to a yellowish green color, which suggests what the modern world knows as a boletus. He remembers that his father had described this very species to him, and they were the deadliest poison. He tastes the thing. It is pungent. He almost spits it out, but then it seems merely hot to the taste and full-flavored, a kind of German mustard with horse-radish. He swallows it. There ensues a curious tingling sensation in his finger-tips and toes. His pulse quickens. The blood in his ears sounds like a mill-race. He loses his balance, falls, forgets everything. While he lies there unconscious, a peculiar transformation takes place in his personality, for after a while he wakes up feeling bright and cheerful, his complexion a livid white, his eyes large and bright, his pale lips drawn in a cheerless grin. The mild little man is now a lion, fit to be master of his house. He goes home, and in a scene of violent retribution he imposes his will on his wife and that noisome friend of hers. He is so successful that the reformation in his household proves lasting, and the whole course of Coombes's life is changed for the better.

Coombes's exhilaration might suggest that he ate *Amanita muscaria*, but Wells expressly distinguishes his purple pileus from that other species, 'the red ones with white spots'. Wells, like Bramah and Sherriff, fills out the necessities of a given plot by inventing the needed mushroom, on which we here might facetiously bestow the name of *Boletus wellsoides*.

Have English authors ever invented flowers or shrubs or trees with which to adorn the English countryside? It seems unlikely. Surrounded by mushrooms on which they never fix their gaze, they usually ignore them, and on the rare occasions when 'toadstools' are needed, they blithely misrepresent them, to make them serve an odious or exotic purpose.
With Wells and Sherriff and Bramah, we observe a peculiar aspect of the mycophobia of the English in its unconscious and spontaneous workings. Doubtless many other examples could be assembled, and we shall mention a few. But first let us note and celebrate one exception. Anne Parish in her novel *The Perennial Bachelor* dispatches one of her characters by means of a dish of mushrooms. Unlike all the other writers about whom we speak, she shows herself thoroughly versed in the properties of the deadly amanita. The episode is only incidental to her plot, and this makes the accuracy of her details even more astounding. It is not as though she had worked hard on mushrooms and then hung her story on them.

In December 1949 *Ellery Queen's Mystery Magazine* published a yarn by August Derleth in which the murderer killed his victim by substituting for morels some specimens of *Gyromitra esculenta*—a species that no villain bent on murder would ever rely on. In *Murder with Mushrooms*, ‘Gordon Ashe’ (pen name for John Creasey) has his victim die the same night that he dines on poisonous mushrooms—a tragic sequel that could not occur. In R.T.M. Scott's *Ann's Crime*, the victims inhale spores of *Amanita phalloides* that have been concealed in a cheese cloth inside a pillow, and forthwith they die, for no doctor, we are told, could save a person whose head had once touched that pillow! . . . Has there been a single writer of detective or mystery stories who has done justice to the genuine drama hidden in the properties peculiar to *Amanita phalloides*?

The German author Gustav Meyrink in his *Bal Macabre* deals with mushroom intoxication. The story is drenched with a pathological atmosphere artfully contrived. There is much about mushrooms in the narrative, but the hallucinations that hang over the whole story
seem to us to be best explained by the effects of alcohol, an alcoholic’s nightmare about toxic mushrooms. Meyrink reveals no knowledge of fungal toxicology. The prolific American writer Percival Wilde in his *Tinsley’s Bones*, published in 1942, introduces as a witness a knowledgeable female mycologist who seems to be addicted to mushrooms of the genus *Panaeolus* as a substitute for cocktails, the author and his character displaying thereby an astonishing command of mushroomic esoterica; but mushrooms in this yarn were not the agent used for the murder.

The facts about lethal mushrooms are to be found, not in standard medical reference works, but in mycological publications. They are well summarized in John Ramsbottom’s *A Handbook of the Larger British Fungi*, an indispensable reference book, which however still characterizes *Amanita mappa* as poisonous, ignoring the work done by the French with this species. Good instances of poisoning by the deadly amanitas appear in a Canadian Government publication, *Mushrooms and Toadstools*, by H. T. Güssow and W. S. Odell. Certainly the best worked up case history in any language is the account of the tragic end of a Madame Boyer and her daughter Elodie, more than a century ago, retold with dramatic suspense and pathos by Camille Fauvel in his delightful little book, *Le Champignon qui tue*, published in Paris in 1926. The best single source of information about all the toxic mushrooms is, we believe, *Les Champignons Toxiques et Hallucinogènes*, by Roger Heim, published by Boubée in Paris.

Mycologists are prone to exaggerate the importance of mushroom poisonings in history. In their writings we repeatedly find a list of eminent persons who have died allegedly from eating poisonous mushrooms, a list that they copy from each other without verification. Some-
times we read that Euripides lost his wife and two daughters thus, an assertion unsupported by any ancient text, apparently based on a misreading of Athenaeus. We read that Pope Clement VII—he who is remembered chiefly for his tribulations with Henry VIII of England—was a victim of poisonous mushrooms. This Pontiff died on September 25, 1534. The date falls in the season of the deadly amanita, but the records show that Clement's symptoms first manifested themselves many months earlier, on May 30, and the course of his fluctuating illness from that moment is well documented. We discover in the record no trace of the telltale syndrome. As his biographer Emmanuel Rodocanachi sagely observes, 'In accordance with the custom of those times, people attributed his death to poison.'

Then there was the case of the Holy Roman Emperor Charles VI, father of Maria Theresa of Austria. He had been worried and run down. 'On the 10th [of October 1740] at night his complaint was increased by an indigestion, occasioned by a dish of mushrooms stewed in oil, of which he ate voraciously.' So wrote Archdeacon William Coxe in his History of the House of Austria. Ten days later, on October 20, while the doctors were still arguing about the diagnosis, he surprised them by dying. The clinical details that Coxe supplies to us, including the patient's sudden death, are compatible with poisoning by the deadly amanita; we have only to assume that the physicians out of a sense of decorum played down the unpleasant details of his last illness. There were no allegations that the poisoning, if such it was, was deliberate. If fungi were the agent, he is the one important personage in modern times thus killed. His end precipi-

tated war and it is on record that Voltaire declared ‘a pot of mushrooms changed the history of Europe’.

Most remarkable is the persistence in mycological writings of the assertion that Tsar Aleksei of Russia or his widow died from mushrooms. Sometimes the texts name him, but more often her. As to the Tsar himself, the circumstances of his death are well known and are unrelated to fungi.

The source of these reports is to be found in a footnote that appears on page 111 of Jean-Jacques Paulet’s classic *Traité des Champignons*, published in Paris in 1793, reading as follows:

*L’accident arrive à la veuve du czar Alexis, qui s’empoisonna avec des champignons qu’on avait gardés pour le carême, et rapporté par Müller, est de notre siècle.*

The accident that befell the widow of the Tsar Alexis, who was poisoned by mushrooms that had been set aside for Lent, as reported by Müller, belongs to our century.

Paulet’s remark would arouse skepticism in any Russian. In winter (especially during Lent) the Great Russians eat an immense quantity of mushrooms, dried and marinated. The Tsarina would of course have enjoyed the pick of the harvest. Had she been the victim of deliberate poisoning, we should certainly not be indebted for our information about this event to a mycologist writing in France almost a century later. The Russian Court chronicles would have reported the episode and the attendant furore. If a mistake was made (which is almost incredible), everyone who shared in the dish would have succumbed. No one in Russia has ever heard of such a tragedy.

Paulet refers to a book by ‘Müller’, Vol. II, p. 59. In vain did we look for it, until one day we came across an essay on this very citation by a Russian, B.P. Vasil’kov, the specialist in the higher fungi residing in Leningrad.
His Russian text has never been published, but it was translated out of Russian into Czech and published in *Mykologicky sborník*, in 1955 (no. 3, pp. 63–65, and no. 4, pp. 97–99), a mushroom journal so obscure that few inside Czechoslovakia see it and only we abroad. It seems that when Paulet refers to ‘Müller’ he means Friedrich Christian Weber, whose *Das Veränderte Russland* first appeared in Frankfort in 1721, and again in German in 1729 and 1738. An English translation, *The Present State of Russia*, came out in two volumes in 1723, and a French version, also in two volumes, in 1725, entitled *Nouveaux Mémoires sur l'État présent de la Grande Russie ou Moscovie*. Some copies of the French edition were wrongly bound, carrying on the title page by mistake the heading of a chapter *Les Moeurs et Usages des Ostyakes*, contributed by Johann Bernhard Müller, a Swedish prisoner-of-war living in Siberia. Endowed with a rare gift of serendipity, B.P. Vasil’kov came across one of the misbound copies in the M.E. Saltykov-Shchedrin Public Library in Leningrad, and there in Volume II, p. 59, was the telltale quotation showing precisely where Paulet had made his mistake. (Vasil’kov was the one man in millions who would grasp the meaning of what he had found.) The French source reads:

> La Czarine Douairière, veuve du feu Czar Alexis, étant morte au Carême de l’année 1715, on ouvrit son corps, & l’on trouva que la principale cause de sa maladie, étoit d’avoir trop mangé de ces champignons marinés, pour observer le jeûne plus régulièrement.

In the English text, Vol. I, p. 333, this is the translation:

> The Czarina-Dowager, Relict of the late Czar Alexius, dying in the year 1715, during Lent, her Body was opened, and it was found, that her Indisposition was chiefly occasioned by eating too much of those pickled Mushrooms, out of Devotion of strictly observing her Fast.

So there is no question of poisonous mushrooms,
merely overindulgence in delectable pickled mushrooms. The German author Weber was incapable of understanding the Russian appetite for mushrooms and credits the Tsarina Dowager with an excess of pious zeal! The French mycologist Paulet, with a clear French text before him, was incapable of distinguishing toxic mushrooms from an excessive indulgence in good mushrooms! A long succession of other writers, undoubtedly mycophobes at heart, have accepted Paulet’s account without verification, on the mycophobe’s rule-of-thumb that nothing bad said about mushrooms can be undeserved.

But the imbroglio does not end here. The German edition, as we said before, first appeared in 1721 in Frankfort. In it Weber had attributed the death from mushrooms, not to the widow of Tsar Aleksei, but to the widow of Ivan V, and this account survived in the later German editions. But the widow of Ivan V was still alive when Weber’s book appeared: she died in 1723, not 1715! Quite properly, the English and French translations happily avoided killing off the living Tsarina Dowager, but substituted another by guesswork. As for the widow of the Tsar Aleksei, the mother of Peter the Great, a personage in her own right known to historians as Natalija Kyrilovna Naryshkina, she died in 1694, not 1715. Weber was confused. There remains another possibility suggested by Vasil’kov: The Tsarina Dowager Marfa Matveevna Apraksina, widow of Fëdor III Alekseevich, who in fact died on December 31, 1715, but whom Weber never mentions.

A famous surfeit of lampreys once brought about the death of an English sovereign. It would be singularly fitting, given the Russian addiction to mushrooms, that a surfeit of mushrooms should have precipitated the end of an exalted personage in the Russian Imperial household. On the likelihood that Weber had a specific death
in mind, we choose to think that Marfa Matveevna died of a gluttonous appetite for mushrooms at Christmastide in 1713, the autopsy revealing the cause of her death, that cause supplying History with her only claim on lasting fame.

So much for the famous men and women whose deaths have been attributed rightly or wrongly to mushrooms. This mortuary procession of alleged mushroomic victims would be incomplete if we did not here add the murders revealed by l'affaire Girard. In this case the victims were persons of no consequence: their very names are forgotten. But the circumstances that brought them to their deaths are, for mycophiles and epicures of crime, both instructive and fascinating.

The standard mushroom manuals of France, like those of England, have always been saturated with mycophobic caution. By overstating the toxic dangers of various species, they have aimed at assuring the safety of their readers. But, through a strange conjunction of events, that very bias once contributed to the disastrous end of a man who trusted his mushroom manual too much. Such is the lesson to be learned from this police episode.

Girard's murders would doubtless have drawn wide attention if the press stories had not broken at the precise moment of the great spring offensive of 1918, the final year of the first World War. Girard was a Parisian, and his accomplices were his wife and his mistress. He murdered only his friends, after insuring their lives in his own favor. Poisons were his instrument, and among other poisons he used toadstools gathered for him in the forest of Rambouillet by an old hobo known as le père Théo, whose testimony later was damning to the accused. From time to time Girard would order from Théo a mess of amanitas: they had to have white gills veil, and volva—the stigmata of the deadly amanita, but
also of *Amanita mappa* and *citrina*. Girard and his wife would serve these fungi to their victims at sumptuous dinners in their own apartment. Sometimes the guest went home and after a lingering illness died, but on other occasions, to the surprise and discomfiture of the Girards, the intended victim suffered no ill effects. Indeed, a number of them lived to give their evidence to the police.

In 1918 the standard mushroom manual of France was Paul Dumée’s. Like all of the over-cautious manuals of that time, it lumped *Amanita citrina* with the deadly ones. Girard had not thought it necessary, therefore, to distinguish the lethal amanitas when instructing old Théo about the mushrooms to gather. Thus it came about that when Théo brought in a mess of *Amanita phalloides*, the victim would enjoy a dish of tasty mushrooms and later die. But when Théo produced specimens of innocent *A. citrina*, the intended victim must have found them less pleasant to the taste, and that was the end of the matter. For the deadly amanita makes a delectable dish, whereas its relative the innocent citrina scarcely rises palate-wise to the mediocre level.

Thus it may be said that Girard was deceived and misled by Dumée’s over-cautious manual, with the result that some of his friends and intended victims unwittingly survived his honest efforts to do them in, and he in turn was fatally entangled in the law’s toils. Now that the French manuals have improved, Girard’s mistake is unlikely to be repeated. Had Girard hailed from Sérignan, Henri Fabre’s village in the Provence, he would have known from childhood not to rely on Dumée, for these peasants need no manuals.

Girard’s crimes would have been forgotten, had it not happened that Camille Fauvel, that prodigious mycophile, was a *Commissaire de Police* in Paris at the time,
and though he was not handling the Girard case, having lately been charged with the more famous and important but less interesting Mata Hari dossier, he followed it with expert attention, even interviewing Girard in Fresnes prison after the conviction, in the interests of mycological lore. Fauvel published an admirable narrative of the affair many years later, in the Supplément to the issues of June and August, 1936, of the Revue de Mycologie, and we have drawn our facts from his account. It should be added that Girard died in his prison bed of tuberculosis a few days after he was interviewed, never having admitted his guilt nor that he had relied on the unsound advice of Dumée. But Fauvel's inference is based upon evidence that leaves little room for doubt.

All that we have set forth in this chapter up to now—the description of the singular properties of lethal mushrooms, the inadequacy of mystery writers when they deal with this theme, our comments on alleged poisonings of eminent personages and the mushroomic murders of unimportant folk—has had only one purpose: to equip the reader for a reconsideration of the death of the Emperor Claudius in A.D. 54. On that occasion, the whole of the Roman Empire and the known world swung on a dish of poisoned mushrooms. The accounts in the ancient writings of that famous event are an old, old story, familiar to all students of antiquity. Those texts have been parsed by students, dissected by historians, pondered by moralists for close on twenty centuries. It would seem that by now every conceivable interpretation must have been hit upon, and the resources of scholarly inquiry exhausted. Indeed, the signs of exhaustion are not lacking: in our own generation Guglielmo Ferraro in his The Women of the Caesars has not only struggled to exonerate Agrippina of the dreadful charge laid at her
door, but to portray her as a noble Roman matron!

It would be surprising if at this late date fresh evidence shedding light on Claudius’s death were discovered, and yet this is what we think we have done. We rely solely on the same worn texts, and we entrust our fate to the verdict of scholars far more learned than we. Those old texts have a message to deliver to us that can be dissected only by one who is a lover of mushrooms, and above all an amateur of venomy—amateur in the sense of a critical but passive observer of those who have practiced that subtle art.

Let us recall the background of the crime. Claudius succeeded Caligula as emperor in the year 41, at the age of 51. By his third wife, Messalina, he had had a son, Britannicus, born the year before his accession. After executing Messalina for adultery, he married his niece Agrippina, who by a previous marriage had a son of her own, three years senior to Britannicus; and her son was destined to worldly immortality as the Emperor Nero. Indeed, Agrippina’s motive in murdering her husband was to assure the succession to Nero, in which endeavor success crowned her efforts. Claudius at the time of his death was said to be favoring Britannicus, and it was even bruited that he had bequeathed the Empire to Britannicus in a will that Agrippina destroyed.

From A.D. 50 the youth to be known to posterity as Nero had as his tutor Seneca the Elder, and at the time of the crime Seneca was an intimate of the imperial circle, probably privy to all that took place at Court. He could have left us the inside story of what happened, but instead he veils his remarks in satire—the prudent evasion of one who undoubtedly knew too much. Three of the ancient historians have given us accounts of the event. Tacitus, who was born probably in the year after Claudius’s death, wrote his narrative about sixty years
later; Suetonius's version came a few years after that; and Dio Cassius told the story again almost two centuries after the event. These three secondary sources differ among themselves in details, which gives to their agreement on essentials a stamp of verisimilitude. In the main they were not copying each other, and they probably had the important facts right.

Claudius was exceedingly fond of the mushrooms known to the Romans as *boleti*: indeed a plausible tradition has it that his favorite kind was what we know today as *Amanita caesarea*. (In antiquity *boleti* meant what mycologists since Linnaeus' day have called the amanitas.) The dish of mushrooms that he ate on the fateful day consisted of *poisoned*, not poisonous mushrooms. On this all three of the ancient historians agree, in different words. None identifies the poison that was used, but they are abundantly clear that poison was added to the Emperor's favorite dish. Here is Tacitus, Book XII, Chap. lxvii of the *Annals* in the Loeb edition:

Adeoque cuncta mox pernotuere, ut temporum illorum scriptores prodiderint infusum de electa bili cibo holto venerium.

So notorious, later, were the whole proceedings that authors of the period have recorded that the poison was sprinkled on an exceptionally fine mushroom.

Suetonius gives two versions, in Book V, Chap. xlv, in the Loeb edition:

Et veneno quidem occisum convenit; ubi autem et per quem dato, discrepat. Quidam tradunt epulantes in arce cum sacerdotibus per Halotum spadonem praegustatorem; alii domestico convivio per ipsam Agrippinam, quae boletum medicatum avidissimo ciborum talium optulerat.

That Claudius was poisoned is the general belief, but when it was done and by whom is disputed. Some say that it was his taster, the eunuch Halotus, as he was banqueting on the Citadel with the priests; others that at a family dinner Agrippina served the drug to him with her own hand in mushrooms, a dish of which he was extravagantly fond.
Suetonius places the poisoned mushrooms only in his alternative account, but mushrooms could have been the vehicle that Halotus used too, and this may be implied. Dio Cassius comes down to us in a Greek summary. In Book LXI he accuses Agrippina of having put the poison into ‘one of the vegetables called mushrooms’, for mushroom the Greek text using the word μύκης. A few pages later Dio Cassius refers again to the same poison when he says:

Agrippina was ever ready to attempt the most daring undertakings: for example, she caused the death of Marcus Junius Silanus, sending him some of the poison with which she had treacherously murdered her husband.

What poison did Agrippina use? This much we know: she turned for advice and aid to a woman named Locusta, an experienced artist in the preparation of poisons, as Dio Cassius puts it. According to Tacitus, the instructions of the Empress to Locusta were narrowly defined. The poison was not to be sudden and instantaneous in its operation, lest the desperate achievement should be discovered. On the other hand, if the effect was slow and consuming, Claudius as his end approached might discover the treachery and take steps to thwart the perpetrators in their ultimate purposes. (He might, that is to say, proclaim Britannicus as his heir.) Something subtle was needed, which would take time but also, at the appointed hour, deprive the victim of his faculties. As Tacitus goes on to say, by Locusta’s skill the desired poison was prepared. The passage in the *Annals* of Tacitus being a crux in our argument, we give it in full:

Tum Agrippina sceleris olim certa et oblatae occasio*ne* ministrorum egens, de genere veneni consultavit, ne repentine et praecepiti facinus proderetur; si lentum et tabidum delegisset, ne admotus supremis Claudius et dolo intellecto ad amorem filii rediret. Exquisitum aliquid placebat, quod turbaret mentem et mortem differret.
It was then that Agrippina, long since bent upon the impious deed, and eagerly seizing the present occasion, well furnished too as she was with wicked agents, deliberated upon the nature of the poison she would use, whether, 'if it were sudden and instantaneous in its operation, the desperate achievement would not be brought to light: if she chose materials slow and consuming in their operation, whether Claudius, when his end approached, and perhaps having discovered the treachery, would not resume his affection for his son'. Something of a subtle nature was therefore resolved upon, 'such as would disorder his brain and require time to kill'. [Oxford translation, Annals, Book XII, Chap. 66.]

There was only one poison available to the ancients that would fulfill Agrippina's requirements—the poison of the deadly amanita. The victim would not give away the game by any abnormal indisposition at the meal, but when the seizure came, he would be so severely stricken that thereafter he would no longer be in command of his own faculties. For one familiar with the properties of Amanita phalloides the text in Tacitus seems transparently clear. The great Roman historian, probably unaware of the meaning behind his words, is revealing the secret of the murderers. But for others than mycophiles there might remain a doubt: is it legitimate for us to infer that Locusta knew the deadly amanita and its secret virtue to which even now, after nineteen centuries, few are privy?

This question troubled and challenged us, not because we were uncertain but because it would be hard to carry conviction with an uninitiated public. Once more we reviewed all the principal sources, all the stray allusions in the classical writers. We concentrated especially on Seneca. After all, he was a witness whose testimony would have been competent in our own courts of justice; he was articulate, and had he not carried the secret etched sharp in his memory from that fateful October day in A.D. 54 until his death eleven years later? Somewhere,
if only by inadvertence, he must have talked, and perhaps his revealing words had survived, their esoteric meaning hitherto unperceived. We embarked on a reading of all his extant writings. We began with his later works, composed after the death of the Emperor, and tried to orient each sentence toward that event. Suddenly one day we came upon the tell-tale phrase: it leaped at us from the page, fairly shouting at us. Yes, surely with sly intention Seneca had imparted the fateful secret to all knowing readers. And before us not a single commentator had ever caught the inner meaning of the simple words.

We refer the reader to Letter XCV that the old Stoic wrote to his friend Lucilius nine or ten years after the death of the Emperor and one or two years before he took his own life on Nero’s orders. In it he describes and deprecates the excesses of the Roman upper class. He refers to the late Emperor’s gluttony:

Di boni, quantum hominum unus venter exercet! Quid? Tu illos boletos, voluptarium venenum, nihil occulti operis iudicas facere, etiam si praestantei non fuerunt.

Good gods! What a number of men does one belly employ! But can you think those mushrooms (a tasty poison) do not secretly and gradually operate, though no bad effect is immediately perceived from them? [Loeb translation]

Here is proof that Seneca knew Amanita phalloides, that an intimate of Nero’s circle was privy to a secret shared by few even today. So far as we know, we are the first to link these lines with the death of Claudius. To us the tell-tale sentence seems to be injected into the letter out of context, as though the writer were blurting out the secret with which he had been living all these years, perhaps blurting it out intentionally, for the benefit of those who could read between his lines.

The period of silent invasion, that véritable signature of the lethal mushroom, was familiar to Seneca, and he
even took pains to mention how tasty the wicked mushroom was. How much guilty knowledge packed into a few words! Read in conjunction with the Empress Agrippina’s instructions to Locusta, we believe it clinches our case. The poison in the dish of Caesar’s amanitas was the poison of the deadly amanita. Two of our authors, Suetonius and Tacitus, give us grounds for supposing that the administration of the poison was entrusted to the eunuch Halotus, whose office it was to taste the Emperor’s food before serving it to him. Tacitus says that a person unnamed (presumably Halotus) poured the poison into the dish of mushrooms. It would have been easy for Locusta to prepare a sauce from the deadly specimens, and by enlisting the aid of Halotus, no suspicion would be aroused by the failure to serve it to others at the feast. However, this is a detail, important at the time to the participants of course, but secondary to the primary fact that the ancient writers are telling us exactly how Locusta handled the assignment with which Agrippina charged her. We believe that the secret of those two fearless and wicked women is withheld from us no longer. (Latinists and mycologists will note that Seneca uses the word boletus for the deadly amanita: clearly it was the term for all amanitas, not merely Amanita caesarea.)

We rest our case on the knowledge shown by Seneca and the quoted passage from Tacitus, taken together. But there is additional circumstantial evidence compatible with our theory. The crime was committed on October 12—in the season when the deadly amanita could be easily found around Rome. On the morrow after Claudius had eaten the mushrooms and while he was yet alive, comedians were introduced into his presence to solace and delight him, as Suetonius says. Since any such kind intention was foreign to Agrippina’s nature, and a for-
tiori at the dreadful moment that we are considering, we may assume that her purpose was different: the comic actors were to bear witness in the public market-place that the Emperor had not been killed but was in truth desperately ill, and the Hippocratic facies that we know he must have manifested gave them full warranty for such a report. Immediately after Claudius’s death, he was proclaimed a god—a posthumous honor for emperors to which Romans were accustomed. Afterwards, when Nero was in secure possession of his imperial office, he was present at a certain banquet where mushrooms were brought in, and someone alluded to the saying common at that time that mushrooms were ‘the food of the gods’, cibus deorum, θεων βρόμα. To this Nero is said to have replied: ‘True enough: my father was made a god by eating a mushroom.’ (This story is told by Suetonius, Dio Cassius, and Petrus Patricius.) Nero’s remark is clothed with wit if he was referring to the deadly amanita, and not merely to a dish of edible mushrooms that had been poisoned; and Nero was in a position to know.

In spite of Locusta’s artistry, we know that her bold stroke was botched, and this leads us to the second part of the crime. The time schedule alone tells us that something went awry. Claudius sat down to his fatal banquet around 2:30 p.m. on October 12. At or shortly after noon the next day he was dead. The lethal amanitas do not kill so quickly. We do not know at what stage in the lengthy banquet he ate his mushrooms, but probably not at the beginning. His seizure could not have taken place before 9 p.m., and probably not before midnight or later, which would mean that his agony lasted only twelve hours. On its face this is impossible. We pointed out earlier that, for a murderer, Amanita phalloides labors under one shortcoming: occasionally a victim recovers. Agrippina could not afford this risk, and even if we had
no evidence to support our theory, we might assume that she and Locusta, as their imperial patient lay at their mercy, resorted to direct methods to dispatch him. Fortunately, our texts come to our help.

'The victim of the plot,' says Dio Cassius, 'was carried from the banquet quite overcome by strong drink, a thing that had happened many times before.' Suetonius's version is hesitant: 'Of those accidents which also ensued hereupon [after eating the mushrooms] the report is variable. Some say that straight upon the receipt of the poison he became speechless, and continuing all night in dolorous torments died a little before day. Others affirm that at first he fell asleep, and afterwards, as the meat flowed and floated aloft, vomited all up.' (If it is true that in his usual drunken stupor he threw up, this was enough to send the two women into a panic, for he might have rid himself of the fungal poison; but perhaps the vomiting came later, when the deadly amanitas finally made themselves felt.) Tacitus is explicit: 'Agrippina therefore became dismayed; but as her life was at stake, she thought little of the odium of her present proceedings, and called in the aid of Xenophon the physician, whom she had already implicated in her guilty purposes. It is believed that he, as if he purposed to assist Claudius in his effort to vomit, put down his throat a feather besmeared with deadly poison; not unaware that in desperate villainies the attempt without the deed is perilous, while to insure the reward they must be done effectually at once.' There was thus a second poisoning, with the Greek physician Xenophon replacing Locusta. Suetonius says that, according to one report, the second poisoning was by clyster.

What was that poison to which Xenophon had hurried recourse? Robert Graves in private correspondence offers us an answer that fits the circumstances perfectly. Not
long after Claudius's death, a satire (attributed usually to Seneca) was published on the emperor's deification to which the author gave the title of *Apocolocynotosis*, an artificial word inserting the Greek *colocynthis* into the middle of *apotheosis*. The colocynth (as we call this gourd in English) was the Greek name used in Rome at the time for a gourd recently introduced from the Near East. When the title of the satire is translated the Pumpkination of Claudius, all its sap is drained out of the name: a 'pumpkin-head' means merely that Claudius was made a dunce of, was 'duncified'. Moreover, the botanist is rendered uncomfortable by an anachronism: the pumpkins and squashes were introduced into Europe in the 15th century, being native to America. The Mediterranean shores knew other cucurbits, but not the pumpkins and squashes. Scholars who use 'pumkinification', miss the point of *Apocolocynotosis*.

The 'colocynth' as used in Rome at that time is not edible. It is exceedingly bitter, whence its name 'the bitter gourd'. It is not native to Italy, but was imported from the arid areas of the Near East, notably Palestine. This is the famous gourd that responded to Elisha's miraculous powers in II Kings, Chapter 4, verses 38–41:

And Elisha came againe to Gilgal, and there was a dearth in the land, and the sonnes of the Prophets were sitting before him: and hee said unto his servant, Set on the great pot, and seethe pottage for the sonnes of the Prophets.

And one went out into the field to gather herbes, and found a wild vine, and gathered thereof wilde gourds his lap full, and came and shred them into the pot of pottage: for they knew them not.

So they poured out for the men to eat: and it came to passe as they were eating of the pottage, that they cried out, and said, O thou man of God, there is death in the pot. And they could not eate thereof.

But he said, Then bring meale. And he cast it into the pot: And he said, poure out for the people, that they may eat. And there was no harme in the pot.

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In minimal doses the colocynth is a violent purgative; in larger doses it is lethal. It happens that we know the history of this drug in surprising detail. In the first century of the Christian era the upper classes of Rome were much concerned with their health: hypochondriasis was rampant, and miracle drugs were being discovered one after the other.² In A.D. 43, when Claudius led a campaign into Britain, one Scribonius Largus was serving as an army surgeon with his forces. Some scholars have assumed that he then rose to the status of the Emperor’s private physician and that he was in attendance on Messalina. However this may be, it seems certain that C. Julius Callistus, a freedman who became a powerful favorite of Claudius, encouraged Scribonius to assemble and circulate a book of prescriptions, drawing these writings to the attention of the Emperor. They are the earliest of such writings that have come down to us in Latin literature, and they must have exerted considerable influence on the medical practice of that age. Among them Prescription 106 employs colocynth, which Scribonius called by its Greek name, showing that it was at that time a novelty introduced from the East. It probably enjoyed considerable vogue among the elite and fashionable of Rome in the middle of the first century. In the desperate extremity of that turbulent night of October 12, A.D. 54, when the Greek physician Xenophon was called in consultation and permitted himself to become a particeps criminis, it was natural for him to come to the rescue of Locusta and Agrippina by dispatching Claudius with an overdose of colocynth, ad-

²Some of the drugs used in imperial Rome have survived in use until recent times. One such is the agaric, and another is colocynth, this latter having been the base for ‘general issue’ purgative pills in the British army in the first world war. We too, in the mid-20th century, are witnessing a spate of miraculous pharmaceutical discoveries. Will a single one of them be remembered in A.D. 3850?
ministered by mouth or clyster or both. This explains the name that Seneca gave to his satire. Claudius’s last words, as attributed to him by Seneca, were: *Vae me! puto concacavi me*—‘There now! I say, I have fouled myself!’ which would be apt for either colocynth or the deadly amanita.⁵

If then our reading of the text is right, Claudius was done in with a one-two knock-out, first a dose of the deadly amanita, and then a dose of colocynth. As a pun on ‘apotheosis’, the name of Seneca’s satire *Apocolocyntosis* at last becomes clothed with wit: the deification of an emperor is reduced to a repulsive scatological metamorphosis. When, later, Agrippina did away with Marcus Junius Silanus (as Dio Cassius tells us), it was the deadly amanita that she used, and not colocynth; for colocynth proclaims its presence by its bitterness, and an intended victim would spew it out forthwith.

At noon on October 13 the gates of the imperial palace in Rome swung open, and Nero, then a youth of 17, emerged and presented himself as the new emperor to the army detachment that was on guard there. The Emperor Claudius was dead, or *in extremis*. There could have been no reason, only danger, in prolonging the interval between the death of the old emperor and the assumption of authority by the new.

And so we bring our review of Claudius’s death to an end. The three ancient historians who tell us the story were not clinicians. Their accounts, differing sharply in the unessential details, give us a surprisingly clear and consistent overall clinical picture. This is circumstantial evidence of virtually conclusive weight that they were telling the truth. They could not severally have invented

⁵ For information concerning the early use of colocynth in Rome, the best source is Wilhelm Schonack’s scholarly study *Die Rezeptsammlung des Scribonius Largus*, published in Jena in 1912.
a combination of symptoms, and a sequence of events, that two thousand years later would speak for themselves.

Our sources say that a curtain of secrecy had shrouded the palace during the illness of Claudius. It is tempting to try to reconstruct the scenes in the imperial palace before and during the crime. The plot had been laid earlier in whispered conversations between Agrippina and Locusta in some safe spot to which Locusta had been furtively summoned. How stirred Locusta must have been by her great assignment: the world offered none bigger for a person in her line of work. Locusta, if she possessed imagination as well as art, may well have leaped with excitement at the thought that this deed, artfully accomplished, would bring her immortality; and indeed it has done so. But during that fateful night the tension must have been unbearable. Had their victim foiled their efforts prematurely from drunkenness, by vomiting before the poisonous amanita had done its damage? Might he survive and resume the exercise of imperial functions? Was Locusta vexed, her professional pride hurt, when Xenophon was called in, or was she relieved? With what anxious eyes Locusta and Agrippina must have searched each other’s ill-lighted faces as the hours crept on! But in any case, with his enemies in command at his bedside, Claudius stood no chance.

The triumph of Agrippina and her fellow conspirators bestowed on them all power. They may well have gloated in their success, and were so situated that they could talk with a large measure of impunity. In the writings of Seneca and the three historians, one seems to hear echoes of veiled boasting, as though Locusta and Agrippina were dying to tell just how they had contrived their ends. Their words were veiled, in homage to virtue, but thinly, and lend themselves to understanding by the initiated, if only across a chasm of nineteen centuries.