AN

HISTORY

OF

FUNGUSSES,

GROWING ABOUT

HALIFAX.

WITH

FORTY-FOUR COPPER-PLATES;

ON WHICH ARE ENGRAVED

FIFTY-ONE SPECIES of AGARICS:

Wherein their Varieties, and various Appearances in the different Stages of Growth, are faithfully exhibited in more than

TWO HUNDRED FIGURES,

Copied with great Care from the PLANTS, when newly gathered and in a State of Perfection.

With a particular DESCRIPTION of each SPECIES, in all its Stages,

From the firſt Appearance to the utter Decay of the Plant; with the Time when they were gathered; the Soil and Situation in which they grew; their Duration; and the particular Places mentioned, where all the New or Rare Species were found.

The Whole being a plain Recital of FACTS, the Reſult of more than Twenty Years Obſervation.

IN THREE VOLUMES.

By JAMES BOLTON,

Member of the Nat. Hiſt. Society, at EDINBURGH.

VOL. I.

NATURA SEMPER EADEM.

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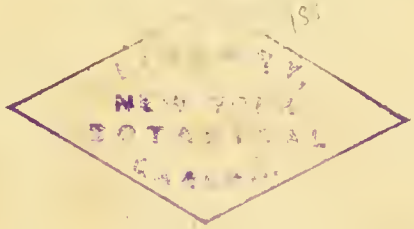

TO THE

RIGHT HONOURABLE

THE

EARL OF GAINSBOROUGH.

My Lord,

SCIENCE will flouriſh under the Patronage of Virtue, and Men of every Claſs will always approve and purſue thoſe Studies, which are diſtinguiſhed with the Regard and Approbation of their Superiors.

Not to enter into a Detail of the many excellent Qualities wherewith your Lordſhip's Name ſtands diſtinguiſhed, I have an aſſured Right to addreſs you, as a Generous Promoter of a Science the moſt rational and moſt pleaſing, as well as the moſt eſſential to the Life of Man, I mean that of Botany.

But as no Science can be perfectly and thoroughly underſtood, till a Knowledge of its conſtituent Objects be attained, ---Therefore every proper Attempt to diſcriminate and aſcertain its Species, muſt be uſeful, in a greater or leſſer Degree, in Proportion to its Succeſs.

Engliſh BOTANY has received many and great Improvements in the laſt and preſent Ages, and yet the moſt

 extenſive

extenſive as well as the moſt entertaining Branch thereof, the CRYPTOGAMIA CLASS, has been too ſuperficially regarded. That our Knowledge of the *Fungi*, the laſt Order of this Claſs, is very deficient, will evidently appear from this, that a greater Number of its Species have been actually gathered, in a Compaſs of Ground not exceeding eight or ten Miles round *Halifax*, than have yet been aſcertained in our beſt and moſt correct Catalogue of the Britiſh Plants. The above Species are the Subject of the preſent Work; but as Original Drawings from Nature, of the whole Number, are now in your Lordſhip's Poſſeſſion, it is not neceſſary to recapitulate them here.

I am happy, my Lord, to embrace this Opportunity of acknowledging, that it is to your LORDSHIP's Generous Encouragement, together with that of your late Noble Relative, the GOOD DUCHESS DOWAGER of PORTLAND, that the Work in a great Meaſure owes its Exiſtence, and of profeſſing that

I am,

With the higheſt Regard,

My Lord,

Your Lordſhip's,

Moſt obedient and moſt humble Servant,

HALIFAX,
January 1, 1788.

JAMES BOLTON.

INTRODUCTION.

AS this work may poſſibly fall into the hands of ſome who are not Botaniſts, and yet may have a natural deſire to inform themſelves of ſo much of the Theory, as may enable them, by the Practice, to divert the melancholy of an amuſive walk, or to paſs agreeably, a few hours of rural retirement; whoſe line of converſation, or whoſe ſituation in the country, may not afford them an opportunity of receiving ſuch inſtructions as may tend to improve, or even awaken, a talent given them by Nature, for an amuſement ſo rational, ſo pleaſing, ſo conducive to the health of the body, and the recreation of the mind: To theſe it will not be unacceptable, to be ſo far informed of the Generic Characters of the Plants here treated of, as may enable them, at ſight of a ſpecimen, to determine, at once, to what Genus or Family it belongs.

The

The Figures which are on the engraved title, placed in the book by way of Frontiſpiece, though they are ſimple and mean, yet they are Natural, and ſo far repreſent the diſtinguiſhing Characteriſtics of the Genera, as may, with the aſſiſtance of a ſhort explanation, render them plain to a moderate capacity.

An Explanation of the Frontiſpiece.

Fig. A. *Genus* 1. *Agaricus (Muſhroom).*

A Fungus, having a pileus or hat, growing horizontally, and having gills on the under-ſide. There are two diviſions of this Genus, firſt, having the hat ſupported on a pillar or ſtem; ſecond, an hat without a pillar *(paraſitic)*, adhering by one of its ſides to other plants. The little figure at A. repreſents the *Agaricus integer*.

Fig. B. *Genus* 2. *Boletus (Touchwood).*

A Fungus, growing horizontally, having pores or holes on the under-ſide. There are two diviſions of this Genus, firſt, thoſe without a ſtem *(paraſitic)* adhering laterally to other plants; ſecond, having an upright central ſtem or pillar. The figure at B. repreſents the *Boletus luteus.*

Fig. C. *Genus* 3. *Hydnum.*

A Fungus, having an horizontal Pileus, with awl-ſhaped ſoft prickles growing underneath, the pileus ſupported on a pillar. The figures at C. repreſent the *Hydnum repandum*, and *Hydnum auriſcalpum.*

Fig, D. *Genus* 4. *Phallus (Morell)*

A Fungus, conſiſting of an hat and a pillar, hat oval, ſmooth on the inſide, honeycombed or eared on the outſide. D. repreſents the *Phallus eſculentus*, or common eſculent Morell.

Fig.

Fig. E. *Genus* 5. *Clathrus.*

A Fungus, roundiſh or oblong, hollow within, netted, latticed or windowed, the latticing connected on every ſide, often reſting on a ſmooth receptacle, which is ſupported on a ſtem or pillar. The figures at E. repreſent the *Clathrus nudus*, and *Clathrus fulvus*.

Fig. F. *Genus* 6. *Halvella.*

A Fungus, with a pileus or hat, ſmooth on both ſides. There are two diviſions of this Genus, firſt, with the hat ſupported on a ſtem or pillar; ſecond, the hat ſeſſile or without a pillar. The figures at F. repreſent the *Halvella mitra*, and the *Halvella inflata*; a curious new ſpecies, five inches high.

Fig. G. *Genus* 7. *Peziza.*

A Fungus, bell-ſhaped, cup-ſhaped, or fennel-ſhaped, generally ſmooth, and of equal ſubſtance throughout. The figures at G. repreſent the *Peziza lentifera*, and an elegant new Britiſh ſpecies, the *Peziza undulata*.

Fig. H. *Genus* 8. *Clavaria.*

A Fungus, growing perpendicularly, ſimple or branched, ſmooth, and of one uniform ſurface. The figures at H. repreſent the *Clavariæ muſcoides*, and *Ophiaglo ſſoides*.

Fig. I. *Genus* 9. *Lycoperdon (Puff-ball).*

A Fungus, roundiſh, conſiſting of a bark or rind, which breaks generally in the ſummit, and diſcharges an impalpable duſt or *farina*, in form of ſmoke. There are three diviſions of this Genus, firſt, thoſe that are deſtitute of root, and ſubterraneous; ſecond, with a root and paraſitic; third, with a root, and growing on the ground. The figure at I. repreſents the *Lycoperdon boviſta*.

Fig.

Fig. K. *Genus* 10. *Sphæria.*

A Fungus, having numerous ſpherical or oblong veſicles, regularly arranged under ſome part of its ſurface; which veſicles diſcharge a duſt or powder. There are two diviſions of this Genus, firſt, agaric-like, growing on the ground, of a ſoft filamentous ſubſtance, having a proper root, volva, ſtem, and pileus; ſecond, paraſitic, ſeſſile, or ſupported on a pillar, and are generally of an hard, horny, or woody ſubſtance throughout. The little figures at K. repreſent the *Sphæria tuberculoſa*, and the *Sphæria agariciformis*, a new ſpecies, four or five inches high, with a bulbous volvated root, a ſtem, and a pileus. This is a very curious plant, and a true non-deſcript, as will be ſeen in its proper place.

Fig. L. *Genus* 11. *Mucor (Mould or Mouldineſs).*

A Fungus, conſiſting of a roundiſh veſicle, ſupported on a filament, and containing numerous ſeeds, affixed to an hair-like receptacle. The figure at L. repreſents the *Mucor mucedo*, as it grew on the ſtalk of a pear, which had a ſmall part of the fruit adhering to it, in a putrid ſtate.

Theſe few characters being eſtabliſhed in the memory, it will be eaſy, on ſight of a ſpecimen, to determine, properly and certainly, to which of the above families it belongs. But the firſt Genus—the Agarics—being very numerous, and a perplexing ſimilarity obtaining between ſome of the ſpecies, it therefore becomes neceſſary to examine with care, the form, texture, number, and ſituation of the parts of the plant under review, before we can diſcover a certain diſcriminative, ſpecific mark, peculiar to that ſpecies, and not to be found in any other;—and till ſuch a mark be diſcovered, we cannot truly ſay, that the ſpecies is properly defined or aſcertained. I would not here be underſtood to mean, that we are to diſcover a part in every ſpecies, which is not to be found in ſome other, this in a ſimple ſenſe is impoſſible; but the diſtinguiſhing mark is to be diſcovered

covered by examining all the parts in a combined or complicated ſcene. And when a plant is diſcovered, concerning which we are doubtful whether it is a ſpecies of itſelf, or only a variety of ſpecies already known, we ought carefully to collate it with the original, from which we ſuppoſe it may poſſibly be derived; and if we find it to agree in the number, figure, and ſituation of its parts, and that the matter of which it is compoſed, agree in ſubſtance or texture, we may reaſonably ſuppoſe, that the doubtful plant is a variety and not a ſpecies, though it may be much different, in reſpect to time, ſoil, magnitude, colour, &c.

On the contrary, though two plants may agree in colour, time, ſoil, ſituation, ſize, ſmell, taſte, &c. yet if they diſagree in any one eſſential mark, we are nevertheleſs certain of their ſpecific diſtinction. For inſtance, ſuppoſe the *Agaricus ſimitarius* has an upright white ſtem, growing from a bulbous root, which is deſtitute of volva; ſo has the *Agaricus annulatus*. Suppoſe it further, to have a large white pileus, brown at the apex, and covered here and there with ſoft brown ſcales; ſuppoſe it to have a white curtain, and gills of a pale fleſh colour, while young, and changing their colour afterwards; the *Agaricus annulatus* exhibits all the above characters, as evidently as the other. Thus far, therefore, no certain ſpecific mark is diſcoverable; but on examining them a little further we find, that the gills of the *ſimetarius* are arranged in one ſeries only, being all of equal length, and extended from the rim of the pileus to the top of the ſtem; but in the *annulatus* they are arranged in ſeveral ſeries, unequal in length, which is a certain mark of diſtinction in the two ſpecies. This one diagnoſtic being found, we then ſupport it by aids, drawn from habit, figure, ſoil, ſize, duration, ſmell, taſte, colour, and diſſolution; all which being properly attended to, will, with the aſſiſtance of application to the ſtudy, and actual obſervation made upon the plants in the different ſtages of growth, render the knowledge of their ſpecific diſtinctions, both eaſy and certain.

To explain a little further what I mean, by aids to ſupport the ſpecific mark, in the above inſtance, The pileus in the *Agaricus ſimitarius*, is of

an oval figure while young, conical when full grown, and in decay lacerates and diſſolves; that of the *annulatus*, globular while young, when full grown bell-ſhaped, and withers in decay. The gills in the *ſimitarius* turn from a red to a black colour, and melt into a black inky fluid; thoſe of the *annulatus* change to a pale brown, and wither. In the *ſimitarius*, the curtain vaniſhes as ſoon as it has performed its office; in the *annulatus*, it abides after its ſeparation from the pileus, and remains upon the ſtem to the laſt.

As a previous knowledge of the parts of an Agaric, will be neceſſary to the making the above obſervations, it may not be judged improper to give a ſhort and plain explanation of them referring to the figures in the plate, at the head of this introduction.

Explanation of the Plate.

FIG. A.

Repreſents a young plant of the *Agaricus muſcarius*, cloven downright, to ſhew the ſituation of the root, ſtem, and pileus, while the plant is yet ſurrounded by the volva; the curtain is removed to ſhew the ſituation of the gills. *Fig.* 1, the volva. *Fig.* 4, the gills.

FIG. B.

The ſame plant, repreſented as a little advanced in growth, to ſhew the manner in which the volva, *fig.* 1, is torn by the increaſe of the pileus and ſtem.

FIG. C.

Shews the curtain, *fig.* 3, extended from the ſtem to the rim of the pileus, unbroken, and performing its office. *Fig.* 2. the pileus or hat.

FIG.

FIG. D.

Shews the curtain lacerated, or torn in fragments, part remaining upon the ſtem, and part on the rim or margin of the pileus:—examples of which we have in the *Agaricus pompatus**, *villoſus*, *caſtaneus*, &c.

FIG. E.

Repreſents the curtain ſeparating from the pileus all round its margin, without being torn, as in the *Agaricus muſcarius*†, *verrucoſus*, &c.

FIG. F.

Shews the gills, *fig.* 4, branched, or divided and ſubdivided; the ſhorter being united at their baſe into the longer: as in the *Agaricus chanterellus*, *infundibuliformis*§, &c.

FIG. G.

Shews the gills arranged in three ſeries, of unequal length; the firſt ſeries extended from the top of the ſtem to the rim of the pileus; the ſecond ſeries extended but two thirds of the way, and the third ſeries extends but one third of the way from the rim towards the centre: and this arrangement of the gills is the moſt common. It is however ſubject to irregularity; the ſame ſeries ſometimes varying in length, in reſpect to one another; ſometimes the alternate order of their diſpoſition is not regular; and the ſecond and third ſeries are ſometimes deficient in their number.

FIG. H.

Shews the gills arranged in two ſeries, as in the *Agaricus muſcarius*‡, and *Agaricus politus*;—but of this arrangement we have but few examples in the Engliſh Agarics.

* Tab. 5, 42, 10.—† Tab. 27.—§ Tab. 34.—‡ Tab. 27, 30.

FIG. I.

Shews the gills arranged in one ſeries only, being all extended from the top of the ſtem to the rim of the pileus; as in the *Agaricus integer**, *luridus*, *ſimitarius*, &c.

The gills furniſh us with many other aids, which muſt neceſſarily be attended to, in order to the inveſtigation of ſpecies. In ſome they are narrow[a] and arched, ſo as to render the lower ſurface of the Agaric, as it were excavated or hollow; in others they are ſtraight, making the lower ſurface nearly plain[b] or flat; in others again they are broad and deep, ſo as to render it prominent or bellied[c]. In ſome they are thin, numerous[d], and very cloſely arranged; in others they are groſs and remote[e]. In ſome the firſt ſeries adheres by a broad baſe to the top of the ſtem[f], and grow narrower towards the extremity; in others they are broad, and lopped off at the baſe, either adhering to the ſtem by a ſmall claw[g], or not all adhering thereto. In ſome they are broadeſt in the middle, growing narrower[h] to each extremity; in others they are narrow and pointed at the baſe, and grow broader and broader to the extremity, where they are lopped off obtuſely[i].——The above circumſtances regarding the gills being conſtant, ought by no means to be diſregarded in the deſcription of the ſpecies.

Much confuſion has long prevailed in this genus of plants, chiefly owing to the brief, or obſcure deſcription which have been given of them; for their parts are ſo few, that every one of them ought to be regarded with the greateſt care, with all that is ſingular, and peculiar to its circumſtances.

In deſcribing an Agaric, every part of the plant ſhould be examined, in reſpect to the following particulars.

The

* Tab. 1, 25, 44.——*a* Tab. 3, 31, 40.——*b* Tab. 6, 36.——*c* Tab. 23, 27, 38.——*d* Tab. 25, 44.——*e* Tab, 28, 43.——*f* Tab. 3, 42.——*g* Tab. 6.——*h* Tab. 7, 28, 33.——*i* Tab. 38.

The Root, whether tapering, bulbous, compreſſed, or of what other figure; note the colour and conſiſtance of the fibres, and to what they adhere; whether the root produces one ſingle ſtem, or more than one; and if more how many: ſay in what ſituation it grows, and at what ſeaſon. Note, whether it be furniſhed with a volva, and if there is a volva, ſay of what ſize, figure, texture, colour and duration; if it periſhes and diſappears before the other parts, ſay how, and at what age of the plant:—under this head, note alſo, the duration of the plant, whether it ſprings up and periſhes in the ſpace of a few hours, in one or two days, or whether it abides for weeks.

Of the Stem ſay, whether upright or leaning; if leaning, whether in a regular curve, or crooked in various directions; whether hard and firm on being preſſed between the fingers; or freely yielding to a gentle preſſure; whether ſolid, and of the ſame ſubſtance throughout, or *fiſtular*, hollow within; whether eaſily dividing in filaments, or of a brittle ſpongy ſubſtance, not diviſible in filaments; ſay, how thick, how tall, of what colour both within and without.

If there be a Curtain, ſay, at what age of the plant it breaks, and how, of what colour and conſiſtence it is, and whether it entirely vaniſhes, or leaves any veſtages.

Of the Gills, as before montioned, ſay, if they are in one, two, or three ſeries; whether broad or narrow, many or few; whether fine or coarſe; whether adhering to the ſtem by a narrow claw, by a broad baſe, or not touching to the ſtem. Say of what colour from firſt to laſt. Note, whether they yield a milky fluid, on being wounded or broken; and if ſuch a fluid, ſay of what colour, taſte, and ſmell.

Of the Pileus, note, what figure it aſſumes, from firſt to laſt; what its diameter in a ſtate of perfection, or at full growth; whether waved, undulated, or crumpled round the margin, or regular and even; whether the

the ſurface be ſmooth and plain, or rugged with ſcales, or other inequalities; if rugged, ſay, whether the matter is of the ſame ſubſtance with, and growing from the pileus, or is of a different ſubſtance, adhering to the pileus by means of a glutin, or otherwiſe; and note the colour of theſe inequalities.——If the ſurface is ſmooth, note how it feels to the touch; whether clammy or dry; whether like cloth, ſilk, velvet, leather, vellum, or what elſe; note, whether it conſiſts of much fleſh or not, and of what ſubſtance and colour within; whether ſoft and fibrous, or hard and brittle; whether diſſolving or withering in decay; and note, what mutations of colour take place on its ſurface, from the firſt appearance above ground to the utter decay of the plant.

The plants which now compoſe the Order *Fungi*, were formerly ſuppoſed to be of equivocal generation, the ſport of Nature, the effect of Putrefaction, or the brood of Chance; but that they owe their original to the ſeeds of a parent plant, is now well known, having been proved by MICHELII, in a work entitled *Nova Plantarum Genera*, publiſhed at *Florence*, in 1729, in folio, with many excellent figures; by DILLENIUS, in his *Catalogus Plantarum circa Giſſenſis*, publiſhed at *Frankfort*, in 1719; by GLEDITSCH, in his *Methodus Fungorum*, publiſhed at *Berlin*, in 1753; by BATTARA, in his *Fungorum agri ariminenſis Hiſtoria*, printed in 4to, at *Rimini*, in 1755; but above all by the ingenious HEDWIG, who in a work entitled, *Hiſtoria Generationes et Fructificationes Plantarum Cryptogamicarum*, printed in 4to. at *Petropoli*, in 1784, has by means of the Microſcope proved beyond diſpute the exiſtence of ſtamin and ſtile, or of male and female organs in theſe; as perfect as regular, and effective in the production of proper ſeeds, as in any other vegetable, where they are more obvious to our ſight; his obſervations are illuſtrated by figures, accurately engraved and coloured, from his own drawings. *See his work, plate* 34, 35, 36, 37, *and from figure* 195 *to* 214.

Some obſervations may be made in regard to conſtancy of place, in the plants of this order. The *Agaricus integer, villoſus, purpureus*, &c. the *Boletus luteus*, and *bovinus*; the *Clathrus nudus*, and *denudatus*, I have conſtantly obſerved

obſerved to make their appearance at their reſpective ſeaſons, in one and the ſame place;—on the contrary, the *Agaricus elephantinus* grew abundantly in the *Shroggs*, and ſeveral other woods about *Halifax*, in October, 1786; this preſent year, 1787, I have not found more than one or two plants of it.

In the year 1785, the *Peziza cornucopoides* came up abundantly in one place, in the laſt-named wood, but has not ſince grown there.

In September, 1777, the *Helvella mitra*, grew plentifully in ſeveral woods, in hedges, under trees, and even in paſtures and meadows, in this neighbourhood; and ſince then, in the ſpace of ten years, though my reſearches have been regularly kept up, I have not met with more than three or four ſpecimens of that rare plant.

Theſe obſervations bring to my mind others of a like nature, which I have formerly made on the fugacity of ſome inſects, viz. the *Painted Lady Butterfly*, (*Papilio Cardui*, of LINNÆUS) was ſo plentiful about *Halifax*, in 1780, that ſcarce a field was without them; in fields where flowering plants grew, particularly the *Scabioſa ſucciſa*, and *Trifolium pratenſe*, it was eaſy, with a common bag net, to catch ten or fifteen ſpecimens in the ſpace of an hour or two; but ſince that time, or for ten years before, that inſect has been very rarely, or not at all ſeen in this part of *Yorkſhire*. The like remarks hold good, in a leſſer degree, in reſpect to the *Papilio atalanta*, *Phalæna meticuloſa*, &c. and to ſome Birds, viz. the *Lanius collurio*, *Loxia recurviroſtra*, *Turdus turquatus*, &c.

Some ſpecies of *Fungi* are perennial and abiding, as the *Sphæria tuberculoſa*; others, though they die and fall away annually, have an abiding or perennial root, as the *Sphæria hypoxylon*.

The *Phallus impudicus*, a rare plant here, I have obſerved to grow three ſucceſſive years, in the ſame hand's breadth of ground, though I took up the

the plant, with its radical cord, both the firſt and ſecond year. Its time is in October.

(To be continued in the ſecond Volume)

The ſecond Volume will contain the remainder of the *Agarics*, with the three ſucceeding Genera, *the Boletus*, *Hydnum*, and *Phallus*.

The third will contain the other ſeven, viz. the *Clathrus*, *Halvella*, *Peziza*, *Clavaria*, *Lycoperdon*, *Sphæria*, and *Mucor*; many of which being ſmall objects, will be engraved ſeveral on a plate,

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To many of the plants, here figured and deſcribed, I have not been able to apply the Synonyma of Authors, becauſe I had not an opportunity of peruſing their works; therefore, any communications from Botaniſts, which may aſſiſt me in applying thoſe Synonyma, particularly thoſe of SCHOEFFER, (whoſe valuable work I never ſaw) will be thankfully acknowledged.

*** The Reader is deſired to obſerve, that the Deſcription and the Drawing were not always taken from the ſame ſpecimen—the periſhable nature of the plant often not admitting it; and where the figure does not exactly coincide with the deſcription, in regard to the preciſe hue of colour,—ſo much variation prevailed between the individual which was deſcribed, and the individual which was painted.

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HISTORY OF AGARICS,

GROWING about HALIFAX.

AGARICUS *ſtipitatus, lamellis omnibus æqualibus, Sp: Pl:* 1640. *Agaricus ſtipitatus, pileo convexiuſculo viſcido purpureo, lamellis omnibus æqualibus albis. Hud: Angl:* 610: 4. *Battar, fung, tab.* 15, *fig. E.* I. *integer.*

EQUAL GILL'D AGARIC.

TAB. I.

THE root is a litttle ſwollen and irregular, terminating the ſtem obtuſely; it is firm and feels ſolid, is of a brittle ſubſtance, emits a few proper fibres, and ſuſtains one plant only.

The ſtem round, upright, ſolid, of a ſpongy brittle ſubſtance, the thickneſs of one's thumb, and two or three inches high. The colour is a perfect white, both within and without; there is no curtain.

The gills in one ſeries, regularly extended from the head of the ſtem to the rim of the pileus; ſometimes, however, there are a few intermediate ones extending but half way. They are conſtantly of a pure white colour, while young of a tender ſubſtance, and greedily devoured by the ſnails.

The pileus ſmooth, while young of a globular figure, and covered with a glutin*. When in perfection horizontal, ſmooth, plain, ſometimes white, often ſtrongly tinged, eſpecially towards the rim, with a fine crimſon, a carnation, or a purple colour, which in decay changes to a dirty blue or green; diameter from two to four inches, abounds with fleſh of a ſpongy brittle ſubſtance, and white colour; at laſt diſſolves in a brown turged jelly.

Grows in all the woods about *Halifax*, in plenty, from Auguſt to November.

* A gummy or glutinous fluid, which is found, like a varniſh, on the ſurface of many Agarics.

II. *latus.* AGARICUS *ſtipitatus pileo convexo fuſco, lamellis trifidis latiſſimis carneo pallidis.*

BROAD AGARIC.

TAB. II.

THE root is a little ſwelled, or approaching to a bulbous figure; it is hard and firm if preſſed between the fingers, of a white colour within, and of a dry brittle ſubſtance; covered on the outſide with innumerable dawny fibres, by means whereof it brings up a covering of the mould, amongſt which it grows, when it is gathered. It produces one plant only, and has no volva.

The ſtem round, upright, firm, ſolid, and is eaſily diviſible in fine, ſhining, ſilky filaments, is about the ſize of one's middle finger, and four inches high. The colour, a duſky white on the outſide, and of a ſilver white within; it has no curtain.

The gills in three ſeries, broad, deep, and large, *as expreſſed at* A; they are numerous, thin, and pliable: they are white, and faintly tinged with a kind of duſky fleſh colour.

The pileus from four to ſeven inches diameter, of a ſmooth dry ſubſtance, feels like fine woollen cloth, and is of a kind of browniſh mouſe-colour. The ſubſtance of the fleſh brittle and ſpongy, and of a fair white.——This plant differs from the A. *integer*, in that the gills are in three ſeries, from the A. *muſcarius*, and A. *annulatus*, in having neither volva or curtain.

Grows under old wood piles, and amongſt rotten ſaw duſt, in September and October.

AGARICUS *ſtipitatus, pileo carneo lacteſcente, lamellis rufis, ſtipite longo corneo, Sp: Pl:* 1641. *Hudſon Angl:* 614. *Flo: Scot:* 1012. *Schæf: Fung: tab:* 73. *Bulliard, Pl:* 282. III. *lactiflaus.*

MILKY AGARIC.

TAB. III.

THE root is ſwelled, hard, round, of a brown colour, and emits browniſh ſhort fibres from its ſides; it produces one plant only, and is not ſurrounded by a volva.

The ſtem is round, hard, and firm, generally leaning, or curved; it is the thickneſs of one's little finger, and three inches high; the ſubſtance is white within, and the colour on the outſide a pale reddiſh brown.—There is no curtain.

The gills in three ſeries, narrow, arched, and adhering to the ſtem by a narrow claw; they are numerous, and of a brittle ſubſtance. While young they are white, afterwards changing to a pale browniſh buff colour; when wounded or broken a white milky fluid, of a mild taſte, iſſues out in round drops.

The pileus at firſt convex, afterwards becomes horizontal, and at laſt funnel ſhaped; but in all its ſtages, from firſt to laſt, the margin is deflected. The ſurface is dry, ſmooth, and feels like cloth; of a dark cinnamon brown colour, and from two to four inches diameter. The ſubſtance of the fleſh dry and brittle.

Grows in woods about *Halifax* abundantly, from Auguſt to November.

IV. *denticulatus.* AGARICUS *ſtipitatus, pileo hemiſphærico purpureo livido, lamellis margine dentatus, ſtipite fiſtuloſo.*

TOOTHED GILL'D AGARIC.

TAB. IV.

THE root is hard and oblique, of a brown colour, and covered with dawny fibres; it is not ſurrounded by a volva.

The ſtem is the thickneſs of a gooſe-quill, hollow, the ſubſtance thin, pliable, and tough, eaſily ſplitting in thin ſilky filaments; the colour a very pale browniſh hue, height two or three inches; it has no curtain.

The gills in three ſeries, deep, and adhering to the ſtem by their baſe; they are remote, thin, pellucid, of a pale, livid, watery, purple colour, and are remarkable in being dented along the edges with viſible ruſt coloured dents, *as is expreſſed at* A. Theſe dents, according to the ingenious HEDWIG, are the male parts of fructification. *See his Theoria Cryptogamicarum, P.* 162. *tab.* 34, *fig.* 196, 197.

The pileus hemiſpherical, two inches diameter, a little deflected, and ſtriated at the rim; of a dull livid purple, almoſt deſtitute of fleſh, and of a watery ſubſtance; it diſſolves in decay.

Grows in woods near *Halifax*, but not plentifully. The ſpecimen here deſcribed, grew in *Stump-Wood*, in *Northowram*, September 10, 1787.

V. *eburneus.* AGARICUS *ſtipitatus, pileo plano, lamellis befidus ſtipite, lamellæ et pileo albo.*

IVORY AGARIC.

TAB. IV. FIG. II.

THE whole plant is of a pure white colour, pellucid, and ſeems as if made of ivory.

Grows in meadows, amongſt the graſs, in September. The Specimen here figured, I gathered amongſt the graſs under the elm trees near *Stannary-Lane*, September, 1787.

AGARICUS *ſtipitatus, pileo rotundo coccineo, lamellis olivaceis ſtipite inæequale.* VI. *pompoſus.*

POMPOUS AGARIC.

TAB. V.

THE root conſiſts of an hard and pointed termination of the ſtem, covered with dawny fibres, of a white grey colour; it has no volva.

The ſtem is three or four inches high, largeſt above, tapering towards the root, often bent irregularly, of a pale yellow above, brown near the root, and eaſily divides in yellow ſilky filaments.

The curtain a pale yellow colour, breaks like a fine and delicate ſpider's web, or the fineſt ſilky dawn. It quite vaniſhes before the decay of the plant.

The gills in three ſeries, narrow, thin, numerous, and delicate; while young of a pale yellow, afterwards changing to a greeniſh olive colour. They adhere to the ſtem by a narrow claw.

The pileus two or three inches diameter, deflected round the margin, where it is of a yellow colour, gradually changing to a fine orange, as it approaches towards the centre, which is of a deep orange or ſcarlet colour. The fleſh thick, brittle, and of a pale yellow.

Grows in woods about *Halifax*, frequent in September and October.

VII. *repandus.* AGARICUS *ſtipitatus, pileo repando ſemipllucido, lamellis trifidis carneo pallidis, ſtipite fiſtuloſo albo.*

SPREADING AGARIC.

TAB. VI.

THE root tapers to a point, from which it ſends out a few hard crooked fibres, an inch or two in length; it has no volva.

The ſtem white, ſhining, with a ſilky gloſs, largeſt near the bottom, gradually tapering upwards, ſometimes a little twiſted, and of an irregular ſurface. It is five inches high, fiſtular, and eaſily ſplits in ſmall white ſhining filaments; there is no curtain.

The gills are in three ſeries, deep and very remote, terminating in a broad baſe, but not adhering to the ſtem. *See figure* A. They are of a tender ſoft pliable ſubſtance, and tinged with a faint duſky fleſh colour.

The pileus convex at firſt, when in perfection horizontal, ſpreading out at the rim; four or five inches diameter; of a dead white colour, a tender watery ſubſtance, and deſtitute of fleſh.

Grows in the ſhady parts of woods in the neighbourhood of *Halifax*, in Auguſt and September.

AGARICUS *ſtipitatus, pileo lacerato plumoſo, lamellis trifidis ſtipite fiſtuloſo.* VIII. *criſtatus.*

CRESTED AGARIC.

TAB. VII.

THE root is round, hard, and brown; ſurrounded with ſoft dawny brown fibres, entangled amongſt a grey mouldy matter; it has no volva.

The ſtem is round, hollow, and ſmooth; two inches high; the thickneſs of a duck's quill; of a pale browniſh colour, eaſily dividing into ſilky filaments.

The curtain white, tender, breaks and vaniſhes while the plant is young.

The gills in three ſeries, white, of a tender ſubſtance, broadeſt towards the baſe, but not adhering to the ſtem.

The pileus at firſt conical, afterwards becomes horizontal, and lacerated round the rim; two inches in diameter, and of a ſoft ſilky ſubſtance: the ground colour a pale milky white.—It is thickly covered with little tufts, of a brown red colour, which are not the fragments of a volva, but grow from the ſubſtance of the pileus.

It grows in gardens, but not common. This ſpecimen grew in the garden of J. COOK, Eſq; of *Warley*, September 15, 1787.

IX. AGARICUS *ſtipitatus, pileo lobato, lamellis trifidis decurrentibus, ſtipite tortuoſo.*

cornucopioides.

CORNUCOPIA AGARIC.

TAB. VIII.

THE root is tough, irregular, much twiſted, and ſurrounded with numerous woolly fibres, of a red brown colour; an inch or two from the bottom divides in ſeveral flat twiſted furrowed ſtems, of a black brown colour, and a tough elaſtic leathery ſubſtance; upwards they enlarge, and become more viſibly twiſted, are ſtrongly corded or nerved, which cords or nerves are a continuation of the decurrency of the gills. Theſe ſtems grow four or five in number, from the ſame root, are four or five inches high, and of a dead brown colour.

The gills are in three or four ſeries, they are remote, narrow, tough, and of a dead buff brown; they are remarkably decurrent, their baſes running down the ſtem, even to the root.

The pileus three inches diameter, lobed in a ſingular and not inelegant manner. The lobes are four or five in number, waved and curled on the edges, thin, or almoſt deſtitute of fleſh, of a tough elaſtic ſubſtance, and a duſky cinnamon colour.

Grows in ſhady woods about *Halifax*, but not plentifully. The plant here figured, I gathered in a little wood, near the farm called *Brakenbed*, in *Ovenden*, September 3, 1787.

AGARICUS *ſtipitatus, pileo teſtaceo, ſucco luteſcente, Sp: Pl:* 1641. *Hud: Ang:* 613. *Battar, fung, tab.* 16, *fig. H.* X. *delicioſus.*

ORANGE AGARIC.

TAB. IX.

THE root is an obtuſe termination of the ſtem; it is hard, and emits numerous dawny brown fibres; gathering a portion of mould with it, when taken up: there is no viſible volva.

The ſtem is hard, crooked, and brittle; the thickneſs of a ſwan's quill, and two inches high; the ſubſtance brittle, white within, and not diviſible in fibres; when old becomes fiſtular. There is no curtain.

The gills thin, narrow, arranged in three ſeries; the ſecond and third ſeries irregular in length; they are of a brittle ſubſtance, and a pale buff colour; when broken a milky fluid iſſues out in drops, of a yellow colour, and of a ſoft herby taſte in general; but in ſome a little acrid, eſpecially while young.

The pileus a little waved round the rim, and while young deflected; then becomes horizontal, and at laſt umbilicated in the centre; but the margin does not riſe, ſo as to give it a funnel ſhape. The colour of both pileus and ſtem is a fine full bright orange. In decay it turns brown and diſſolves.

Grows in *Ramſden*, and many other woods about *Halifax*, in October.

It differs from the A. *lactifluus*, in being of a ſcarlet or orange colour, in bleeding a yellow milk, in being a ſmaller plant, and in that it never becomes funnel ſhaped.

XI. *castaneus.* AGARICUS *stipitatus, pileo subconico castaneo, lamellis trifidis, stipite albo fistuloso, cortina alba.*

CHESNUT AGARIC.

TAB. X.

THE root is a small, irregular, roundish bulb, of a firm substance, emitting a few hard brown fibres; it is not surrounded by a volva, and produces one plant only.

The stem is cylindrical, white, and the thickness of a goosequill; it is fistular, with a small perforation; the substance firm, elastic, and easily divides in fine silky fibres. Its height is about three inches.

The curtain is thin and delicate, breaks from the centre, hangs for a little while to the rim of the pileus, and then vanishes, leaving no annulus on the stem; it is white.

The pileus at first conial, with an obtuse point, afterwards becomes hemispherical, and at last nearly flat. The surface is smooth, and of a bright beautiful chesnut brown.

The gills are in three series; the third series very short, and while the plant is young imperceptible; they are of a very pale buff colour, and of a thin and delicate texture.

This is a rare species; I have only seen it in two or three places, particularly in a little wood called *Bracken-Bed-Wood*, in *Ovenden*, where I gathered the specimen here figured and described, in October, 1786.

AGARICUS *ſtipitatus, pileo hemiſphærico membranecio albido, lamellis triſidis remotis pallidis, ſtipite albido fiſtuloſo.* XII. *membraneccus.*

MEMBRANEOUS AGARIC.

TAB. XI.

THE root conſiſts of numerous dawny fibres connected to a ſoft ſpongy termination of the ſtem below; there is no volva.

The ſtem white, fiſtular, and of a thin ſubſtance, eaſily dividing in fine filaments; It is about the thickneſs of a ſwan's quill, and two or three inches high: there is no curtain.

The gills white, thin, deep, and remote, ſoft, flexible, and very delicate; afterwards acquire a faint reddiſh brown tinge, and turns quite black in decay.

The pileus hemiſpherical, white, conſiſting of a thin tranſparent membrane, ſometimes a little waved round the margin, and conſtantly more or leſs deflected.

Grows in the ſhady parts of woods, on the decaying roots of fallen oak trees, about *Halifax*, in ſeveral places.

The whole of this plant is of a light thin ſubſtance, dry, and looks and feels almoſt like fine tiſſue paper. It is a rare ſpecies.

XIII. *cæruleus.* AGARICUS *ſtipitatus, pileo hemiſphærico rugoſo, lamellis trifidis albidis, ſtipite albo.*

BLUE AGARIC.

TAB. XII.

THE root conſiſts of an irregularly compreſſed termination, or rather origin of the ſtem; it emits numerous fine dawny grey fibres: there is no volva.

The ſtem is upright, round, hard, and ſolid; the ſize of a ſwan's quill, and three inches high; it is of a duſky white colour, and has no curtain.

The gills in three ſeries, white, groſs, and brittle; they are narrow, and adhere to the ſtem by their baſe.

The pileus hemiſpherical, two or three inches diameter, of a greyiſh blue colour, and dry ſurface; feels like cloth made of coarſe wool, is firm and hard, but yet very brittle. The ſubſtance of the fleſh white and thick.

Gathered in the wood below *Wheatly*, Auguſt 16, 1786; and again in Auguſt, this preſent year 1787.

AGARICUS *ſtipitatus, pileo fuſco lobato undulato, lamellis trifidis profundis carneo pallidis, ſtipite fiſtuloſo griſeo.* XIV. *irregularis.*

IRREGULAR AGARIC.

TAB. XIII.

THE root in this, as in moſt other Agarics, conſiſts of an hard abrupt termination of the ſtem, emitting a multitude of fibres, of a grey colour, and a dawny, or mucor-like ſubſtance; in this ſpecies there is no volva.

The ſtem is round, ſmooth, fiſtular, and of a pale grey colour, eaſily diviſible into ſmall filaments.

The curtain is of a greyiſh white, thin, and of a very light and dawny texture; breaks and entirely vaniſhes ſoon after the plant appears above ground.

The gills in three ſeries, deep, and remote; of a tough pliable ſubſtance, and a pale duſky fleſh colour.

The pileus a ſordid purple brown, covered with a glutinous matter, two inches in diameter, lobed, waved, and crupled in a very irregular manner; while young irregularly deflected round the margin, at all times a little beaked or elevated in the centre.

Grows in dry and barren paſture and meadow ground, about *Halifax*, in great plenty, in Auguſt and September.

XV. *ſerratis.* AGARICUS *ſtipitatus pileo globoſo purpureo, lamellis croceis ſerratis.*

AGARIC WITH SERRATED GILLS.

TAB. XIV.

THE root is an hard blunt termination of the ſtem; it is of a brittle ſubſtance, and ſeems to adhere to the ground by its baſe, without viſible fibres: there is no volva.

The ſtem is round, upright, hard, and ſolid; it is the thickneſs of one's thumb, three inches long, and of a duſky gold colour; the ſubſtance within a pale yellow, brittle, and ſpongy; not diviſible in filaments: there is no curtain.

The gills in three ſeries, rather remote, ſtrong, groſs, and brittle, adhering to the ſtem by a narrow claw; their colour is a fine gold yellow, and they are remarkable, in being viſibly ſerrated on the edges with a browniſh colour.

The pileus globular, three inches in diameter, of a bloomy purple colour; it is ſoft, and feels to the touch like fine woollen cloth, yet there is no viſible dawn. The fleſh or ſubſtance is thick, brittle, and white. The whole plant diſſolves in a brown loathſome jelly, about the third day from its firſt ſpringing up.

Grows in woods, but is rare. The ſpecimen here figured grew in the plantation at *Bramham*, near *Leeds*; it grew under the trees to the left hand, when you enter the park by a footway from *Keddow-Lane-Head*, Auguſt 28, 1786.

AGARICUS *ſtipitatus, pileo cumpanulato fuſco viſcido, lamellis trifidis albis, ſtipite fiſtuloſo albo.* XVI. *concineus.*

NEAT AGARIC.

TAB. XV.

THE root is a little ſwollen, frequently compreſſed, or of an irregular figure; it has a few proper fibres, and is not ſurrounded by a volva.

The ſtem is the thickneſs of a gooſe-quill, white, fiſtular, and of a tender delicate ſubſtance; it is two or three inches high, and has no curtain.

The gills are in three ſeries, numerous, deep, of a thin pliable texture, cloſely and beautifully arranged; their colour, like that of the ſtem, is white.

The pileus of a dark mouſe coloured brown, while young of a bell-ſhape, and covered with a viſcid ſlippery fluid; afterwards becomes dry, and expands, but not ſo as to become horizontal: the fleſh is thin and white, in decay it diſſolves in a brown turgid jelly.

Grows in moiſt places in ſeveral woods about *Halifax*. The ſpecimen here figured, I gathered in the *Birks*, or *Burks*, September 23, 1786.

XVII. *elaſticus.* AGARICUS *ſtipititatus, pileo convexo ferrugenio, lamellis triſidis remotis rigidus, cortina elaſtica albida, ſtipite inæquale.*

ELASTIC AGARIC.

TAB. XVI.

THE root is hard and tuberous, emitting numerous brown fibres, by means whereof, it takes firm hold in the ground; it ſuſtains ſeveral plants, and is deſtitute of volva.

The ſtem is unequal in thickneſs, being largeſt near the root, and gradually tapering upwards; it is ſolid, firm, and elaſtic; of a red brown or ruſt colour, white within, and eaſily divides into thin fibres, or filaments.

The curtain is of a dead white, of a tough ſubſtance, breaks round the verge of the pileus, and remains on the top of the ſtem, like a little thick ruffle, for ſeveral days.

The gills are in three ſeries, groſs, tough, and remote; of a duſky white colour, and adhere to the ſtem by a narrow claw.

The pileus is convex, an inch in diameter, of a browniſh ruſt, or ferrugenious colour, looks and feels like woollen cloth not of the beſt quality, being a litle harſh to the touch. The fleſh is white, of a ſpongy elaſtic ſubſtance, and has a taſte not diſagreeable. The whole plant is of a tough leathery ſubſtance, and in decay dries and withers.

Grows in dry and barren grounds, under oak trees, in October. This ſpecimen grew under oak trees in the Park at *Fixby*, in October, 1786.

AGARICUS *ſtipitatus, pileo lamellis et ſtipite albido, tota planta coriacea.* XVIII. *umbilicatus.*

NAVEL AGARIC.

TAB. XVII.

THE root is a little hard tubercle, the ſize of a ſmall pea, of a browniſh colour, and furniſhed with a great number of fine ſhort capillary greyiſh fibres: there is no volva.

The ſtem is round, cylindrical, the thickneſs of a duck's quill, three inches high, of a dead white colour, and of a ſolid, firm, tough, elaſtic ſubſtance; but eaſily ſplits from end to end, in white, ſpringy, ſhining filaments: there is no curtain.

The gills are diſpoſed in three ſeries, rather broad than otherwiſe, remotely placed, white, and of a tough and pliable ſubſtance.

The pileus at firſt convex, afterwards becomes horizontal and depreſſed in the centre, with a cavity reſembling a navel; it is from one to two inches diameter, of a white colour, a ſmooth ſurface, and a tough elaſtic ſubſtance. The plant is of a ſlow growth, and abides for weeks; in decay the colour changes from white to a yellowiſh brown, after which it melts in a brown liquor.

Grows in cloſe plantations, particularly thoſe of fir or larch, from July to October. It abounds in the plantations about *Fixby-Hall*, the ſeat of T. THORNHILL, Eſq; The rich and extenſive plantations around that rural and beautiful *Villa*, have afforded me ſeveral curious and undeſcribed ſpecies of Britiſh *Fungi*.

XIX. *confertis.* AGARICUS *ſtipitatus, pileo conico albido acuminato, lamellis fuſco pallidis, ſtipite numeroſo albido.*

WHITE CLUSTERED AGARIC.

TAB. XVIII.

THE root is an irregular lump of a tough hard ſubſtance, emitting numerous ſhort grey dawny fibres, it is not ſurrounded by a volva, and ſupports numerous plants.

The ſtem white, dry, gently tapering from the root upwards, the thickneſs of a ſwallow's quill, two inches high, of a dry light ſilky ſubſtance, but not fiſtular. There is a white dawny curtain, viſible only juſt when the pileus firſt peeps above the ſurface of the ground.

The gills are in one ſeries, being all extended from the rim of the pileus to the top of the ſtem; they are cloſely arranged, and of a thin and delicate ſubſtance: their colour is white, with a faint tinge of pale brown.

The pileus is conical, terminating in an acute point, which point is tinged with a yellowiſh brown, the reſt white, the ſurface ſmooth, the ſubſtance light and cottony. In large ſpecimens it is about an inch in diameter; in decay it withers, and becomes like ſoft paper.

Grows amongſt the Bark in hot-houſes. The ſpecimen here figured and deſcribed, grew in the Pine-Stove of J. CAYGILL, Eſq; at *Halifax*, November, 1785.

AGARICUS *ſtipitatus, pileo fulvo, anguſto convexo, lameilis anguſtus craſſis, ſtipite ramoſo craſſo ſpongioſo fuſco. Battara, Tab.* 11. *B. C. F.* XX. *laricinus.*

LARCH AGARIC.

TAB. XIX.

THE root conſiſts of an irregular miſhapen hard piece of matter, ſuited, in ſize and ſhape, to the cavities wherein it grows, as if it had been caſt there in a mould; upwards it divides in ſeveral ſtems, which are the thickneſs of one's thumb, in the largeſt plants; the ſtems compreſs one another near the root, and are frequently united in their ſubſtance, growing out of each other, and are actually branched; the colour is a dead greyiſh brown, and the ſubſtance ſoft, ſpongy, and eaſily compreſſible: the root is deſtitute of volva.

The curtain is narrow, of a dead white colour, and a ſoft cottony ſubſtance.

The gills are in two ſeries, of unequal length; they are few, narrow, groſs, brittle, and white.

The pileus is fox-coloured, feels ſoft and clothy to the touch; its diameter is often not much more than that of the ſtem; it is conſtantly of a convex figure, and a dry, light, ſpongy ſubſtance; eaſily compreſſible between the fingers; and inſtantly, on removing the preſſure, re-aſſumes its own form.

Grows on the bark of larch trees, when in a ſtate of decay; it ſeems to take root between the wood and the bark, the latter of which it burſts to make itſelf way.

The ſpecimen here figured, I gathered in a little plantation at *Lee-Bridge*, near *Halifax*; where I have ſeen the plant every Autumn, for ſeveral years paſt.

XXI. *pullatus.* AGARICUS *ſtipitatus, pileo campanulato plicato atro, ſtipite longo ventricoſo albido. Fungus pileolo cumpanulato vertice levi, &c. Mich: Gen: p.* 189, *t.* 80, *fig.* 5.

MOURNING AGARIC.

TAB. XX.

THE root conſiſts of a few grey dawny fibres, ſurrounding the bottom of the ſtem, and extending themſelves on the ſurface of the matter wherein it grows, for a ſmall ſpace, round about.

The ſtem is ſeven or eight inches high, of a ſilver white, fiſtular, and ſwelling towards the lower part, juſt like the ſeeding ſtem of an onion; it is of a very tender ſubſtance, and eaſily divides in white ſilky tender filaments.

The pileus and gills ſeem to be inſeperable, or united in one ſubſtance; they are plaited like a fan. The ſubſtance tender, watery, pellucid, of a pale colour, but thickly covered with a black glutin, or moiſt powder, which diſſolves on being touched. The weight of the pileus, and weakneſs of the ſtem, makes it very difficult to take up the plant without breaking the neck of the ſtem; as is expreſſed in one of the figures.

Grows in the ſpace of a night, and falls and diſſolves the following day. The ſpecimen, from which I took the figure, diſſolved in the time of drawing into a black viſcid liquor, which, when dry, lay like a ſooty powder on the table, June 22, 1786.

Grows on dunghills, or in fat meadows. The pileus at its firſt appearance, is covered with a grey dawny volva, which ſoon vaniſhes.

AGARICUS *ſtipitatus, pileo planiuſculo lacteſcente margine deflexo, lamellis ramoſus pallidis.* XXII. *piperatus.*

WHITE PEPPER AGARIC.

TAB. XXI.

THE root conſiſts of a few ſhort fibres, adhering to the bottom of the ſtem, which terminates in an obtuſe point: there is no volva.

The ſtem is white, ſmalleſt above and below, ſwollen in the middle, where it is an inch or more in diameter; the ſurface is ſmooth, and the ſubſtance firm, ſolid, hard, and very brittle: there is no curtain.

The gills are extremely numerous and irregular; their central extremity juſt touches, ſcarce adheres to, the top of the ſtem; they are narrow, and of brittle ſubſtance; of a very pale milk colour, and exhibit no proper arrangement, the ſhorter being united unto the longer, or iſſuing from them in a branched order; ſome are entire for their whole length, others are divided and ſubdivided in a diſhotomous order, as in the *Agaricus chanterellus*.

The pileus is white, ſmooth, hard, and brittle; at firſt much deflected round the rim, afterwards becomes horizontal, and at laſt funnel-ſhaped. When either the pileus, gills, or ſtem are wounded, there iſſues out a milk, of an hot peppery taſte, and leaves a diſagreeable ſenſation on the tongue for ſome hours.

Grows in woods about *Halifax*.

This is the true Pepper Agaric, found by Dr. LISTER in *Morton* woods, under *Pinno-Moor, Craven*. *See Raii: Syn: p.* 5. There is another Agaric, with which this ſeems to have been confounded, as will appear in the courſe of this work.

XXIII. AGARICUS *ſtipitatus, pileo ſordide flavo, lamellis luteo rufis.*
cinnamoneus. *Sp: Pl:* 1642.

Agaricus ſtipitatus, pileo convexo rufo lamellis flaveſcentibus, ſtipite longo flavo. Hudſon, 615, 18.

BROWN AGARIC.

TAB. XXII.

THE root is hard, brown, compreſſed or flat; ſometimes irregularly diſtorted, emits brown hard fibres, and takes firm hold in the ground: it is not ſurrounded by a volva.

The ſtem is ſmooth, ſmalleſt near the root, gradually increaſing upwards; while young it is ſolid, but becomes fiſtular afterwards; the ſubſtance is tough, and eaſily divided into ſlender filaments; the colour is a yellowiſh brown; it is three or four inches high: there is no curtain.

The gills are in three ſeries, deep, of a ſoft pliable ſubſtance, and of a pale yellowiſh cinnamon colour; comparitively they are few in number.

The pileus is at firſt convex and waved round the margin, afterwards it becomes horizontal, and more ſenſibly waved and undulated; and at laſt the rim becomes ſo much elevated, as to give the pileus a funnel ſhape, but with a gentle elevation in the centre. The ſurface is ſmooth, feels like vellum, and is of a cinnamon colour; the whole plant is of a tough pliable ſubſtance, and continues for ſeveral days.

Grows in woods about *Halifax* abundantly; greatly varying in ſize, according to ſoil and ſituation.

AGARICUS *ſtipitatus, pileo campanulato ſubfuſco ſquamato, lamellis albidis, ſtipite bulboſo anulato. Lightfoot's Flora Scot:* 1025. *Agaricus (procerus). Hudſon's Flo: Ang:* 612, 10. XXIV. *annulatus.*

RUFFLED AGARIC.

TAB. XXIII.

THE root is bulb-ſhaped, of a ſoft and ſpongy ſubſtance, about the ſize of a pigeon's egg, and ſends out numerous proper fibres: there is no volva.

The ſtem is upright, ſmooth, round, and gradually tapering from the root upwards; it is white, fiſtular, and has a fine dawn in the perforation; the ſubſtance ſoft, elaſtic, and eaſily diviſible in ſoft ſilky filaments; the colour is white at firſt, but afterwards changes to a pale ſtraw colour. It is five or ſix inches high.

The curtain is a little tough, white, ſperates from the rim of the pileus, abides on the ſtem like a ruffle, and is moveable upwards and downwards, by means of a central ring, to which it adheres, and in which it ſeems to originate.

The gills in two or three ſeries, of various irregular lengths, numerous, thin, and deep; at firſt gently tinged with a light roſe colour, as in the common muſhroom, next they become white, and laſtly of a pale brown.

The pileus is at firſt of a globular figure, afterwards becomes conical, or bell-ſhaped ſometimes beaked at the vortex, with a little prominence, the ſize of a ſleeve button; when full grown is wide expanded round the rim, and approaches to an horizontal poſition; changes from white to a pale brown, and is covered with ſoft brown ſcales, which are not the fragments of a volva, as in the *Agaricus, muſcarius,* but grow from the ſubſtance of the pileus.

Grows in the dry parts of woods about *Halifax,* in October, but not plentifully.

XXV. *extinctorius.* AGARICUS *ſtipitatus, pileo campaniformi albido lacero, lamellis niveis, ſtipite ſubbulboſo ſubulato nudo. Linn: Flo: Succ:* 1196. *Sp: Pl:* 1643. *Hudſon Angl:* 617, 29.

EXTINGUISHER AGARIC.

TAB. XXIV.

THE root is a little ſwelled, hard, white, and emits brown fibres from the ſides; ſometimes it ſuſtains ſeveral plants, ſometimes only one: it is not ſurrounded by a volva.

The ſtem is cylindrical, ſmooth, white, fiſtular, with a ſmall perforation, wherein is a ſoft dawny matter like cotton; it is an inch in circumference, and five inches high: there is no curtain.

The gills are in one ſeries, extremely numerous, thin, deep, and delicate; of a pure white colour at firſt, afterwards turn to a pale brown, and in decay diſſolve in a dark brown liquor. Their great number makes the pileus heavy as in the *Agaricus ſimilarius, plicatus, luridus,* &c.

The pileus is ſhaped like an extinguiſher, terminating bluntly above, and ſpreading out at the rim, where it is a little waved and undulated; the ſurface is ſmooth while the plant is young, afterwards becomes ſtiated, and at laſt lacerates and diſſolves. The colour is white at firſt, except a gentle tinge of brown near the top, as it advances in age, the white changes to a very pale brown; and in ſome ſpecimens there are a few dawny ſcales or tufts of a pale brown, as in the *Agaricus ſimitarius.*

Grows amongſt ſand, in moiſt and ſhady ſituations about *Halifax,* but is rare there.

AGARICUS *ſtipitatus, pileo conico griſeo viſcido, margine inæquale, lamellis integris profundis ſordide cæruleus, ſtipite ſolida arcuata.* XXVI. *luridus.*

FOUL AGARIC.

TAB. XXV.

THE root is hard and miſhapen, of a dirty brown, emitting many fibres, ſuſtaining one or more plants, and is deſtitute of volva.

The ſtem is hard, ſolid, crooked, or bent in various directions; it is about the thickneſs of one's little finger, of an ugly pale litter-colour, and four inches high: there is no curtain.

The gills are in one ſeries, extended from the rim of the pileus to the centre, but do not adhere to, or even touch the ſtem; they are extremely numerous, and very cloſely arranged; they are deep and large, rendering the pileus heavy by their great number; they are of a diſagreeable ſordid greyiſh blue, and in decay diſſolve in a brown ſtinking fluid.

The pileus irregularly cone-ſhaped, diameter of the baſe two inches and a half, height from the baſe to the top about the ſame meaſure; it is of a kind of duſky greyiſh hue, with a caſt of dirty olive colour; is quite ſmooth, and covered with a thick ſlippery loathſome half-congealed fluid. The margin is lobed, and ſinuated in an irregular manner; the lobes and hollows being very unequal and ſometimes ſeparated by deep gaſhes.

Grows on *Gibbet-Hill*, and in ſome other places near *Halifax*.—It differs from the A. *ſtriatus*, as will be ſeen hereafter.

In this ſpecies we frequently find ſeveral young plants adhering to the root of a full grown one.

XXVII. *domeſticus.* AGARICUS *ſtipititatus, pileo conico, ſubfuſco lacerato ſquamoſo, lamellis integris griſeo-pallidis, ſtipite fiſtuloſo albido.*

DOMESTIC AGARIC.

TAB. XXVI.

THE root conſiſts of a great number of dawny grey fibres, ſome of which inſinuate themſelves into the ſubſtance of the putrid wood, whereon it grows; the reſt creep like mouldineſs upon its ſurface. The plants moſt commonly grow in bundles from the ſame root.

The ſtem is white, and ſhines with a ſilky gloſs; it is fiſtular, of a thin light ſubſtance, the thickneſs of a gooſe-quill, and three or four inches high; it eaſily divides in white glittering filaments, and often abides after the pileus is fallen.

The curtain is extremely delicate, and vaniſhes as ſoon as the rim of the pileus begins to ſeparate from the ſtem.

The gills are in one ſeries, numerous, broad, and deep; at firſt of a pale grey colour, but in decay diſſolve in a black inky liquor.

The pileus is at firſt of an oval figure, and wrapped up in a volva which is peculiar to itſelf, and does not inwrap the root. The volva is of a cottony ſubſtance, and a very pale grey brown colour; as the pileus increaſes in bigneſs it burſts in fragments, and remains like warts on the ſurface. From an oval, the pileus changes to a conical figure; the margin undulated, next becomes bell-ſhaped, and at laſt lacerates and diſſolves.

Grows on decaying pieces of moiſt wood, in cellars, cold kitchens, &c. in plenty.

AGARICUS *ſtipitatus, lamellis dimidieatis ſolitariis, ſtipite volvato, apice dilitato, baſe ovato. Sp: Pl:* 1640, 4. XXVIII. *muſcarius.*

Agaricus cauleſcens pileo ſanguineo verrucis, lamelliſque albis, ſtipite albo baſi globoſo. Flo: Lapp: 595. *Hudſon Angl:* 612. *Lightfoot Fl: Scot:* 1010, 3.

FLY AGARIC.

TAB. XXVII.

THE root is large, and bulb-ſhaped, of a ſoft ſpongy ſubſtance, and together with the young plant ſurrounded by a thick volva, when the ſtem begins to ſhoot, the volva breaks, and the pileus appears; as it advances in growth, the bulb at the root diminiſhes in ſize, and is often nearly exhauſted in full grown plants

The ſtem is white, brown, or reddiſh; ſoft, ſpongy, and, while the plant is young, ſolid; afterwards becomes fiſtular, the thickneſs of one's thumb, and four or five inches high.

The curtain, after it has performed its office, is ſeparated from the pileus all round the rim, without being torn, and remains for ſome time on the ſtem, like an elegant white ruffle.

The gills are in two ſeries, moſt of them extended from the ſtem to the rim of the pileus, but are interſperſed with others extending but half way; they are white.

The pileus, at its firſt eruption from the volva, is of a globular figure, ſmooth and ſhining, with a ſlippery glutin; when full grown becomes horizontal, and the ſurface nearly flat; it is of various colours, but generally tinged, more or leſs, with red. In dry ſeaſons, or improper ſoils, the volva does not ſeparate from the pileus, but remains in broken fragments, like warts, upon its ſuface.

Grows in dry woods about *Halifax*, from Auguſt to October.

XXIX. *elephantinus.* AGARICUS *ſtipitatus, pileo craſſo hemiſpherico ſabluteo viſcido, lamellis triſidis craſſis fragilis ſubalbidis, ſtipite albo craſſo ſpongioſo.*

ELEPHANT AGARIC.

TAB. XXVIII.

THE root conſiſts of a few fibers, which iſſue from the bottom of the ſtem: there is no volva.

The ſtem is upright, ſolid, large, and of a fair white colour; it is ſix inches in circumference; and about four inches high; the ſubſtance is ſoft, ſpongy, and eaſily compreſſible; the figure approaches to an oval, being broadeſt in the middle, and narrow above and below. When the plant grows old, the ſtem becomes cylindrical, hard, of a dark colour, and hollow within: it has no annulus or curtain.

The gills are arranged in three ſeries, they are deep, remote, extremely groſs, (being a line in thickneſs) brittle, and appear like wax of a very pale kind of whitiſh tallow colour.

The pileus, at its firſt appearance, is globular, and inwraps the whole of the plant, except the radical fibres: for its margin or rim ſurrounds and embraces the bottom of the ſtem, and by this means ſerves the ſame purpoſe as a volva in ſome other Agarics; afterwards it acquires an hemiſpherical figure, is covered with a viſcid liquor, and is of a yellowiſh clay colour. In decay the pileus becomes irregularly horizontal, lacerates, becomes dry, changes to dark colours of various hues, and ſeems as if a conſiderable degree of fire had paſſed upon it.

Grows in the dry part of woods about *Halifax*, in October, and, if the ſeaſon is dry, abides ſeveral weeks in the ſtate repreſented in the upper figure, *plate* 28.

AGARICUS *ſtipitatus, pileo convexo luteo, lamellis vireſcentibus, ſtipite flavo. Hudſon Angl:* 615, 20. *Fungus mediæ magnitudinis pileolo ſuperne rufo flavicante, lamellis ſubtis ſordide virentibus Raii: Syn:* 10, 57. XXX. *faſcicularis.*

BUNDLED AGARIC.

TAB. XXIX.

THE root is a miſhapen piece of fungous matter, large in proportion to the number of plants it ſuſtains, emits a few fibres, is of tough ſubſtance, deſtitute of volva, and ſuſtains numerous plants, from three to fifteen.

The ſtem curved, growing at firſt horizontally, and then riſing gradually upwards; it is about the thickneſs of a ſwan's-quill, fiſtular and three inches high; it is of a duſky yellow colour, with a tinge of green, and thinly covered with a dawny kind of filaments.

The curtain is of a pale yellow, ſlender and delicate as the fineſt ſpider's web: found only when the plant is juſt ſprung up, breaks, and vaniſhes when the verge of the pileus begins to unfold.

The gills are extremely thin and numerous, they are narrow of a ſoft pliable ſubſtance, and greeniſh olive colour; they adhere lightly to the ſtem by a narrow claw.

The pileus from one to two inches diameter, ſmooth, of a pale yellow, near the margin, growing ſtronger near the top, where it is of an orange or ſcarlet colour; the top or central elevation, is not always in the middle, but bears to one ſide, which gives the pileus the figure of a nipple ſhell. In decay the whole changes to a dirty brown, and diſſolves in the ſpace of five or ſix days from its firſt ſpringing up.

Grows on putrid wood, or on the ground amongſt timber in wood-yards, or near the roots of trees, about *Halifax*, in Auguſt and September, plentifully.

XXXI. *politus.* AGARICUS *ſtipitatus, pileo convexo viridi lamellis fuſcis befidis, cortina glauco griſeo, ſtipite brevi.*

GREEN POLISHED AGARIC.

TAB. XXX.

THE root is hard, firm, obtuſe, and covered with numerous grey dawny fibres: there is no volva.

The ſtem is round, hard, firm, ſolid, and an inch and a half high; it is of a warm brown, or ferruginous colour, and rather diminiſhes in thickneſs from the bottom upwards.

The curtain is of a greyiſh pale blue green, on the outſide, and ſeems covered with a glaucus duſt; on the inſide it is the ſame colour as the gills: it abides in fragments on the ſtem, and on the rim of the pileus, for a little while after its breaking.

The gills are in two ſeries, not adhering to the ſtem; they are deep, and of a pretty ferruginous brown; they are numerous, and of a thin pliable ſubſtance.

The pileus is at firſt egg-ſhaped, then becomes hemiſpherical, afterwards ſpreads out at the verge, and lacerates; it is two or three inches diameter, and of a beautiful bright blueiſh green; at firſt it is covered with a glutin, or gummy fluid, which when dry acts like rich varniſh, and gives an excellent ſhining gloſſy poliſh to the ſurface. In decay the colour fades, and the plant diſſolves at the age of eight or ten days.

Grows under fir trees in the plantations about *Fixby-Hall*, and elſewhere. It takes root amongſt the fallen leaves, juſt as the *Hydnum auriſcalpum* does, on the decaying cones; I never met with it growing in any other kind of ſoil.

AGARICUS *ſtipitatus, pileo campanulato ſtriato pellucido, lamellis adſcendentibus, ſtipite nudo. Sp: Pl:* 1643. *Hudſon Angl:* 618, 31. XXXII. *campanulatus.*

BELL AGARIC.

TAB. XXXI.

THE root is a little brown bulb, emitting brown fibres from its bottom and ſides.

The ſtem is cylindrical, fiſtular, tranſparent, of a whitiſh grey colour, the thickneſs of a ſwallow's quill, and five or ſix inches high.

The curtain is very delicate, vaniſhes when the plant is about an inch high, but leaves a black veſtage on the ſtem, which abides for a little time, and then diſappears.

The gills are in two ſeries, narrow, thin, tranſparent, and of a grey colour, changing black in decay.

The pileus is at firſt conical, ſmooth, and brown, afterwards the rim begins to diverge, and to appear dimly ſtriated, with fine tender lines; the next ſtage a black ciliation begins to appear round the rim, and as it advances in growth the pileus expands, and what before appeared to be ſtria, are now found to be actual plaits, the angles whereof are alternately brown and lead-coloured; the black ciliation is divided into little tufts, which adhere to the extremities of the brown angles, and give a pretty appearance to the rim of the pileus. It is about an inch and a half in diameter, of a tender watery ſubſtance, and ſemi-tranſparent; in decay it diſſolves in a brown liquor. It grows up in one night, and periſhes the next day.

Grows in meadows where the ſoil is rich, in September and October, about *Halifax* plentifully.

XXXIII. AGARICUS *ſtipitatus albus, pleo plicato membraneceo, ſtipite nigro. Sp: Pl:* 1644. *Hudſon Angl:* 621, 44. *Lightfoot Flo: Scot:* 1027, 19.

Androſaceus.

BLACK STALKED AGARIC.

TAB. XXXII.

THE root conſiſts of a few imperceptible fibres, which inſinuate themſelves into the ſubſtance of ſuch decayed vegetable matter, as afford proper nouriſhment to the plant.

The ſtem is one or two inches high, hard, black, and ſhining; from the thickneſs of a horſe's hair to that of a large hog's briſtle, either of which, in ſubſtance and in touch, it not unaptly imitates. It often remains for a conſiderable time after the pileus is fallen.

The gills are few, narrow, and remote; they are of a pale duſky white, while the plant is young, but change to brown afterwards.

The pileus is at firſt conical, and white, afterwards ſpreads, becomes almoſt horizontal, and about half an inch in diameter; the colour changes to brown, pale near the margin, darker in the centre; it is ſometimes ſtriated and conſtantly of a thin, dry, membraneous ſubſtance. In decay it withers and falls off.

Grows on putrid leaves, chiefly thoſe of oak, in the ſhady moiſt parts of woods about *Halifax;* it alſo grows on moors, among ruſhes. I ſaw it in great abundance, in September, this year 1787, on the hill above *Cauſey-Foot*, near *Halifax;* it grew upon the ſtalks of decayed ruſhes, in the place where the *Trientalis europæa*, and the *Ophrys cordata* grow.

AGARICUS *ſtipitatus, pileo hemiſphærico plumoſo murino, lamellis trifidis albidis ſtipite longo plumoſo.* XXXIV. *plumoſus.*

FEATHERED AGARIC.

TAB. XXXIII.

THE root is round, hard, the ſize of a pea, of a browniſh black colour, and emitting a few long hard fibres: it is not ſurrounded by a volva.

The ſtem is hard, ſolid, cylindrical, often bended or waved, the thickneſs of a duck's quill, and about four inches high; it is cloſely covered with ſmall dawny or feathery tufts, of a perfect mouſe-colour: there is no curtain.

The gills are in three ſeries, deep, and terminate in a claw at the baſe, which juſt touches the top of the ſtem; they are numerous, ſoft, flexible, white, and of a dry light ſubſtance.

The pileus is hemiſpherical, an inch and a half in diameter, of a perfect mouſe-colour, and, like the ſtem, thickly covered with little tufts of a dawny matter, which grow from its ſurface, and are of the ſame colour with it; there is a beautiful fringe, of the ſame dawn, all round its margin. The ſubſtance is thin, light, dry, and flexible: it withers in decay.

This curious and beautiful Agaric, I gathered in a little ſteep wood, belonging to the farm called *Ramſden*, in the townſhip of *Ovenden*, near *Halifax*, Auguſt, 1787; it grew in plenty there.

XXXV. *infundibuliformis.* AGARICUS *ſtipitatus, pileo infundibulo murino, lamellis ſeſſilis ramoſus griſeus.*

FUNNEL-SHAPED AGARIC.

TAB. XXXIV.

THE root is little thicker than the bottom of the ſtem; it is obtuſe hard, tough, and emits many ſhort fibres: there is no volva.

The ſtem is about two inches from the root to the gills; it is often flat, and more or leſs depreſſed in longitudinal hollows, with alternate ridges; it is fiſtular, or hollow, quite from the root, and runs inſenſibly into the pileus, as the tube of a *convolvulous* does into its limb—ſo that the upper ſurface of the plant is a continuation of matter, the ſame in ſubſtance and colour, from the verge of the pileus down to the root. The ſubſtance is thin, pliable, tough, and elaſtic; the ſurface a a little gloſſy, feels to the touch like vellum, and is of a greyiſh mouſe-colour. In ſome young ſpecimens there is a kind of membrane, or a continuation of the ſurface extended over the opening of the top of the ſtem, which is repreſented in one of the half-figures, on the plate.

The gills are equal, and ſeem to be of the ſame ſubſtance as the plant: they are branched like nerves, as in the *Agaricus chantarellus*; and are of a kind of ſilvery grey colour.

This Agaric I found in *Lee-Bank-Shroggs*, in October, 1786; it has been brought to me, from ſeveral other places, by my friends.

This plant ſeems to connect the *Agaricus chantarellus* with the *Peziza cornucopioides*, equally partaking of the one and of the other.

AGARICUS *ſtipitatus, pileo conico, margine undulato ſtriato, lamellis trifidis aurnticarneis, ſtipite fiſſa longa minute ſtriata.* XXXVI. *fiſſus.*

SPLIT-STALKED AGARIC.

TAB. XXXV.

THE root is a round, hard tubercle, of a brown colour, furniſhed with numerous ſhort dawny fibres; and is not ſurrounded by a volva.

The ſtem is the thickneſs of a gooſe-quill, and four or five inches high; it is fiſtular, and moſt commonly flat or compreſſed. It appears to be of a pale grey colour, but on being cloſely examined, is found to be neatly ſtriped with fine longitudinal ſtripes, alternately, of a mouſe-colour and a ſilky white, and as fine almoſt as hairs. It is further remarkable in this, that when the plant is arrived to its perfect ſtate, it frequently ſplits from top to bottom, the two halves rolling their edges together, and forming each an hollow tube; after which it abides for ſeveral days, and appears as if the pileus was ſupported upon two ſtems: there is no curtain.

The gills are arranged in three ſeries, deep, numerous, thin, flexible; and of a colour between carnation and orange.

The pileus from one to two inches in diameter, ſtriated near the margin, where it is of a duſky kind of olive colour, but brown at the *apex*.

Grows in the *Shroggs*, the *Burks*, the *North-Dean*, and ſeveral other woods about *Halifax*, as I have obſerved this year 1787.

XXXVI. *rubeus.* AGARICUS *ſtipitatus, pileo convexo, lamellis triſidis profundis, ſtipite longa, tota planta ruberrimo.*

RED AGARIC.

TAB. XXXVI.

THE root conſiſts of a great number of ſhort dawny fibres, connected to the bottom of the ſtem: it is not ſurrounded by a volva.

The ſtem is hard, ſolid, generally curved or bent; it is ſwollen near the bottom, elſewhere equal, and about the thickneſs of a gooſe-quill; it is four or five inches high, and of a ſtrong bright red, as are all the other parts of the plant: there is no curtain.

The gills are in three ſeries, deep, regularly and beautifully arranged; they are thin, tranſparent, and, when ſeen between the eye and the light, are of a bright and glowing ruby colour.

The pileus is an inch and a half in diameter, opaque, and of a fine dark red; it feels cottony to the touch, but there is no perceptible dawn.

This Agaric I ſaw growing in ſeveral places in a little range of wood, belonging to *Shibden-Hall*, near *Halifax*, October 29, 1786; where I gathered the five ſpecimens which are exactly figured on *plate* 36.—I never met with it elſewhere.

AGARICUS *ſtipitatus, pileo campanulato membranaceo, lamellis trifidis albidis pellucidis, ſtipite longiſſimo pellucido albido.* XXXVIII. *tenuis.*

SLENDER AGARIC.

TAB. XXXVII.

THE root conſiſts of numerous white dawny fibres, which inſinuate themſelves into the ſubſtance, or ſpread upon the ſurface, of decaying leaves, ſticks, and other vegetable ſubſtances: there is no volva.

The ſtem is equal, ſmooth, white, pellucid, the thickneſs of a ſmall pack-thread, and ſix inches high; it is extremely tender and brittle, breaks and diſſolves on being touched: there is no curtain.

The gills are few, arranged in three ſeries, very thin and delicate, white, and of a pellucid watery ſubſtance.

The pileus at firſt conical, afterwards bell-ſhaped, ſmooth, pellucid, and of a watery white, except the *apex*, which is tinged with a pale browniſh mouſe-colour; the ſurface is ſmooth and plain till the plant begins to decay; it then appears ſtriated round the rim, and preſently falls and diſſolves.

Grows in the deep, moiſt, and ſhady parts of woods, where the air is ſtill and calm; particularly, in a little wood above *Lee-Bridge*, near the *Brook*, below *Burks-Lane*, near *Halifax*. The ſpecimen above deſcribed, was gathered there, in the beginning of September, 1783. I have ſeen it in *Woodhouſe-Wood*, *North-Dean*, and ſeveral other like places.

XXXIX. *trilobus.* AGARICUS *ſtipitatus, pileo fulvo, margine, ſtriato, lamellis omnibus æqualibus, ſtipite baſi volvata.*

TRILOBATE AGARIC.

TAB. XXXVIII. FIG. II.

THE root is ſwollen, and of a bulbous figure; is ſoft, and of a pale kind of orange colour: it is incloſed in an elegant volva, of the ſame colour, which is divided almoſt to the centre in three lobes or ſegments. It is of a ſoft dawny ſubſtance, the thickneſs of glove-leather, and feels between the fingers to be of a ſubſtance ſimilar thereto. It is permanent, abiding till the decay of the plant.

The ſtem grows gradually ſmaller from the root upwards, while young it is ſolid, round, and ſmooth; when old becomes fiſtular, but with a dawny matter in the perforation; it is of a pale kind of cinnamon colour, and four inches high: there is no curtain.

The gills are in one ſeries, rather remote, deep, not adhering to the ſtem, narrow at the baſe, increaſing in breadth to the extremity, where they are broad, and terminate obtuſely: they are of a pale cinnamon brown.

The pileus is ſmooth, ſtriated near the margin, three inches diameter, and of a beautiful bright brown, inclining to an orange colour.

Grows in the dry parts of woods about *Halifax*. The ſpecimens here figured, I gathered in *Ramſden*, Auguſt 31, 1787.

XL. *lateo albus.* AGARICUS *ſtipitatus parvus, pileo conico ſtriato flavo, lamellis trifidis albis, ſtipite filiformia.*

YELLOW AND WHITE AGARIC.

TAB. XXXVIII. FIG. I.

THE root conſiſts of a few fibres, by which it adheres to decayed plants; particularly moſſes of various kinds,

The ſtem is the thickneſs of an hog's briſtle, of a pale yellow, and an inch high.

The gills are white, deep, and arranged in three ſeries.

The pileus of a pale yellow, conical, and ſtriated.

Grows common in woods near *Halifax*.

AGARICUS *ſtipitatus, pileo plicato membranaceo, lamellis baſi latioribus.* XLI.
Sp: Pl: 1643. *Lightfoot, Scot:* 1026, 18. *Hudſon, Angl:* 261, 24. *umbelliferus.*

UMBRELLA AGARIC.

TAB. XXXIX. FIG. A.

THE Root conſiſts of dawny fibres, adhering to decayed leaves, &c. —The ſtem an inch high, very feeble and delicate; of a pellucid watery ſubſtance.—The gills in one ſeries, very delicate, broadeſt at the baſe, and white.—The pileus the ſize of an hemp-ſeed, white, and gently ſtriated.——Grows in damp woods common about *Halifax.*

AGARICUS *ſtipitatus, pileo luteo convexo ſtriato, lamellis ſtipitaque albis. Sp: Pl:* 1644, *Hudſon Angl:* 622, 45. *Lightfoot, Scot:* 1027, 20. XLII. *clavus.*

PIN AGARIC.

TAB. XXXIX. FIG. B.

IT grows in ſimilar places with the laſt, and is about the ſame ſize, but of a firmer ſubſtance. The colour of the pileus is a browniſh yellow, ſometimes orange-coloured, or of a bright ſcarlet; of a dry opaque ſubſtance, and generally contracted round the rim; in decay it withers, and abides for ſome days in a dry ſtate.

AGARICUS *ſtipitatus, pileo hemiſphærico, lamellis ſtipitaque albis.* XLIII.
Hudſon Ang: 620, 39, *candidus.*

WHITE AGARIC.

TAB. XXXIX. FIG. D.

THE root conſiſts of dawny fibres, by which it adheres to the fallen and decaying ſtalks of plants.—The ſtem half an inch in length, ſoft flexible and of a dead white colour.—The gills white, dry, and flexible.—The pileus of a dead white, at firſt conical, afterward nearly horizontal, but inflected at the rim. It withers in decay, and abides for a long time.—They often grow many near together, on the ſame ſtick, but have ſeparate roots.——Grows in *Wood-houſe-Wood*, but is rare there.

AGARICUS *ſtipitatus, pileo radiato plicato, ſtipite pellucido filiformia.* XLIV.

WHEEL AGARIC. *radiatus.*

TAB. XXXIX. FIG. C.

THE root white, dawny.—The ſtem an inch and a half high, watery, pellucid, extremely brittle and tender.—The pileus at its firſt appearance conical, and of a red brown colour; is in a ſtate of perfection in the ſpace of two or three hours, when it becomes of a blackiſh aſh colour, and pellucid. It conſiſts of two membranes, plaited together like a fan; the angles of the plaits a little ſubtend beyond the margin.—It appears like a ſmall wheel, with ſpokes.——Grows on horſe-dung, after rain, in the month of Auguſt.

XLV. *mollis.* AGARICUS *ſtipitatus, pileo pulvinato griſeo, lamellis trifidis anguſtis albidis, ſtipite bulboſo craſſo ſpongioſo.*

SOFT AGARIC.

TAB. XL.

THE root is bulbous, ſoft, and ſpongy; emitting ſhort dawny, almoſt imperceptible, fibres, by which it adheres to dead and putrid vegetables, particularly oak leaves: there is no volva.

The ſtem is ſoft, light, ſpongy, and brittle; the thickneſs of one's thumb, of a dead white, round, and perfectly upright; it is about three inches high, and deſtitute of curtain.

The gills are narrow, arched, arranged in three ſeries, numerous, thin, delicate, and of a dead white, inclining a little to a pale yellowiſh hue; they are of a ſoft, dry, light ſubſtance; the third ſeries is very ſhort, as expreſſed in the plate.

The pileus is at firſt of an oblong figure, when full grown becomes almoſt flat, but riſing round the ſides in form of a cuſhion, the rim is conſtantly inflected. The ſurface is of a clothy touch, ſmooth, and ſoft; it is of an invariable pale mouſe-colour, from its firſt appearance to the utter decay of the plant; it is three inches in diameter. The fleſh or ſubſtance of the pileus is dry, ſoft, brittle, and incapable of being divided into filaments; it cuts like cream-cheeſe, the colour and ſubſtance of which it not unaptly reſembles.

Grows in the dry parts of woods, and in paſture grounds about *Halifax*, not unfrequently.

It differs from the *Agaricus piperatus*, in being deſtitute of milk, in its ſoft ſubſtance, and bulbous root, and in that the gills are in three regular and diſtinct ſeries. The two laſt circumſtances diſtinguiſh it from the *Agaricus integer* alſo.

AGARICUS *ſtipitatus, pileo palliado ſtriato contorto, lamellis rugoſis, ſtipite arcuata.* XLVI. *ceſpitoſus.*

TURF AGARIC.

TAB. XLI. FIG. C.

THE root is round, hard, and black; emitting ſhort fibres of the ſame colour: there is no volva.—The ſtem is an inch long, bended or bowed; it grows from the perpendicular ſides of the pits where peat has been dug.—The gills are very remote, much diſtorted and crumpled.—The pileus an inch in diameter, ſtriated, pellucid, much diſtorted, and of a yellowiſh clay colour.

AGARICUS *ſtipitatus, pileo fuſco ſtriato undulato, lamellis carneis, ſtipite brevi.* XLVII. *tortilis.*

CRUMPLED AGARIC.

TAB. XLI. FIG. A.

THE root is ſmall, black, and fibrous.—The ſtem a quarter of an inch high, of a duſky fleſh colour; as are alſo the gills.—The pileus is of a dark reddiſh brown, marked with a few *ſtria*; it is convex at firſt, afterwards becomes horizontal, or funnel-ſhaped; the margin lobed, crumpled. and diſtorted in various directions.——Grows in rich garden-mould, about the roots of ſuch plants and ſhrubs as afford much ſhade.

AGARICUS *ſtipitatus, pileo hemiſphærico purpureo, lamellis trifidis albis, ſtipite purpureo.* XLVIII. *purpureus.*

PURPLE AGARIC.

TAB. XLI. FIG. B.

THE root is a round, hard tubercle, furniſhed with brown ſhort fibres.—The ſtem fiſtular, an inch high, and of a livid purple.—The gills deep, arranged in three ſeries, and white.—The pileus more than half an inch in diameter; while young hemiſpherical, of a livid purple, and a little clammy; afterwards horizontal, and of a pale brown.——Grows under cloſe plantations of fir, about *Halifax*, in July, plentifully.

XLIX. *villiſus.* AGARICUS *ſtipitatus, pileo villoſo fulvo, lamellis trifidis leucophæus, cortina alba, ſtipite adſcendente, an picromyces tunicatus. Battar: p.* 47, *Tab.* 8, *Fig. H. Sive, Agaricus mutabilis. Hudſon Angl:* 615, 22.

SHAGGY AGARIC.

TAB. XLII.

THE root conſiſts of a mouldy grey dawn, adhering to the bottom of the ſtem; it is not ſurrounded by a volva.

The ſtem is of an hard dry brittle ſubſtance, of a duſky white, inclining a little to a pale buff colour; it grows at firſt horizontally, and then curving upwards, is five or ſix inches long, and diſtinguiſhed by a thick dawny *annulus*, which ſurrounds it near the top, and in which the curtain originates.

The curtain is wite, fine as a ſpider's web, lacerates, and hangs for ſome time, in white dawny fragments, round the rim of the pileus.

The gills are arranged in three ſeries, they are arched numerous, narrow, and of a pale greyiſh aſh colour.

The pileus is at firſt round or globular, afterwards becomes hemiſpherical, and three inches in diameter; it is covered with a pile or nap, of a dawny, or rather hairy matter, and of a fulvous brown, or fox-colour. The fleſh of the pileus is white and brittle; in decay it lacerates and diſſolves.

Grows under the roots of trees, in woods where the ſoil is dry. I ſaw it in great plenty, in October, 1786, in the dry and ſteep part of the wood called *Ramſden*, it grew, not only from under the roots of trees, but from the ſides of breaks, and from under the rocks; the ſtem being hidden, and horizontal; and the pileus with only juſt the curved part of the ſtem appearing.

AGARICUS *ſtipitatus, pileo fuſco craſſo margine undulato rimoſo, lamellis bifidis craſſis pallidis, ſtipite longo fuſco inæquale.* L. *rigidus.*

RIGID AGARIC.

TAB. XLIII.

THE root conſiſts of a number of ſhort brown fibres iſſuing from the bottom of the ſtem; there is no volva.

The ſtem is generally curved or bent, it is five or ſix inches in length, terminating in a kind of obtuſe point below, or rather appears as if the point was bitten off; upwards it increaſes in thickneſs for about half its length, and decreaſes again to the top; it is an inch or more in diameter, in the thickeſt part; while the plant is young it is ſolid, afterwards becomes fiſtular, in both ſtates is of a brown grey colour, and of an hard, dry, brittle ſubſtance: there is no curtain.

The gills are in two ſeries, few, narrow, of a very pale yellow, rigid, brittle, and very much crumpled and undulated, by reaſon of the rolling in, or inflection of the pileus.

The pileus is at firſt round, afterwards becomes bluntly cone-ſhaped; while young the margin is much inflected round the rim, ſo as to embrace the ſtalk; in the next ſtage of growth it is much undulated or crumpled round the margin; at laſt it ſplits in ſeveral places, falls and diſſolves. Its colour is a duſky reddiſh brown, from firſt to laſt; the ſubſtance of the fleſh thick, brittle, dry, and white.

Grows in the plantations and wood grounds, about *Fixby-Hall*, in July and Auguſt, I have not ſeen it elſewhere.

LI. *ſimitarius.* AGARICUS *ſtipitatus, pileo campanulato lacero, lamellis lateraliter flixuoſis, ſtipite fiſtuloſo. Sp: Pl:* 1643. *Hudſon Angl:* 617, 28. *Lightfoot Scot:* 1021, 13.

EGG AGARIC.

TAB. XLIV.

THE root is bulb-ſhaped, tapering to an obtuſe point below; it is white, emits a few dawny fibres, and is not incloſed in a volva.

The ſtem is cylindrical, fiſtular, with a ſmall perforation; it is white, a little dawny, and ſix or eight inches high.

The curtain is white and delicate; breaks, and entirely vaniſhes, while the plant is young.

The gills are very numerous and cloſe, broad, deep, and render the pileus heavy; they are in one ſeries, being all extended from the rim of the pileus almoſt to the centre, but do not adhere to, or even touch, the ſtem. They are at firſt white, afterwards change to a pale reddiſh colour, and at laſt diſſolve, with the pileus, in a black inky liquor, which falls from the rim in round drops.

The pileus is conical, terminating bluntly above, while young of an oblong oval figure; it is from four to ſix or eight inches high, and one or two diameter at the baſe; it is of a brown or fuſcous colour at the *apex*, which colour is loſt in a duſky white, at a little diſtance below. The ſurface, in ſome ſpecimens, is covered with a kind of browniſh dawny ſcales, which are not the fragments of volva, but grow from its ſurface; while the plant is young theſe ſcales do not appear, and ſometimes it is at all ages deſtitute of them. In decay the pileus lacerates, and the whole diſſolves.

Grows in ſand beſides graſs-beds, and by-paths, near towns and villages, in September and October.

NOMINA TRIVIALIA.

ENGLISH NAMES.

END OF VOL. I.

HISTORIA FUNGORUM Circa *HALIFAX* Sponte NASCENTIUM.

TOM. I


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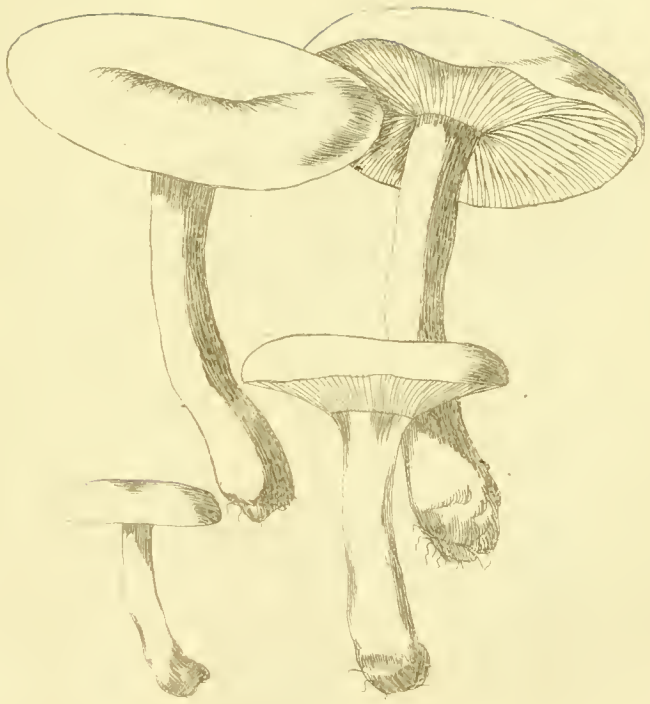
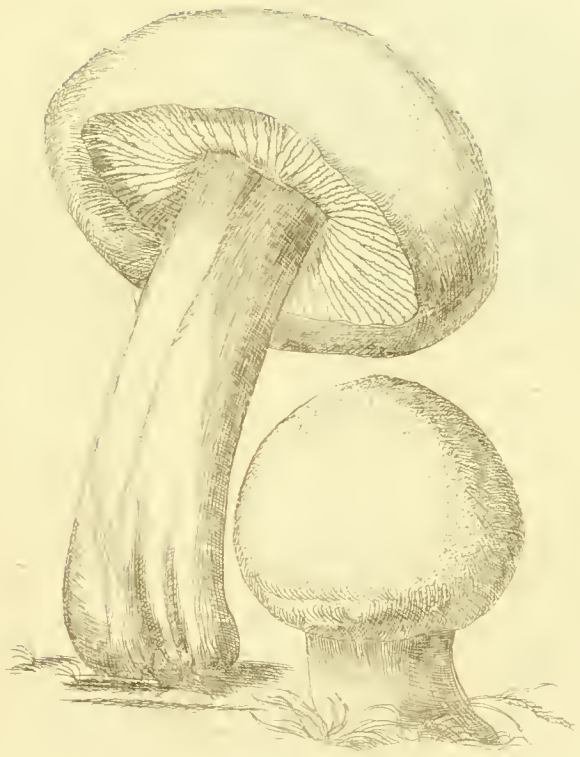
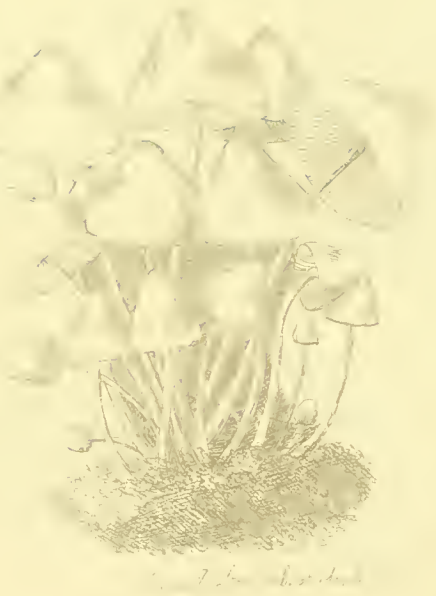


Agaricus coeruleus. Drawn & etched ——— from the Plant. by J. Bolt.



Agaricus coccinnus. — an Ag. cervinus. Schæf. tab. 10?



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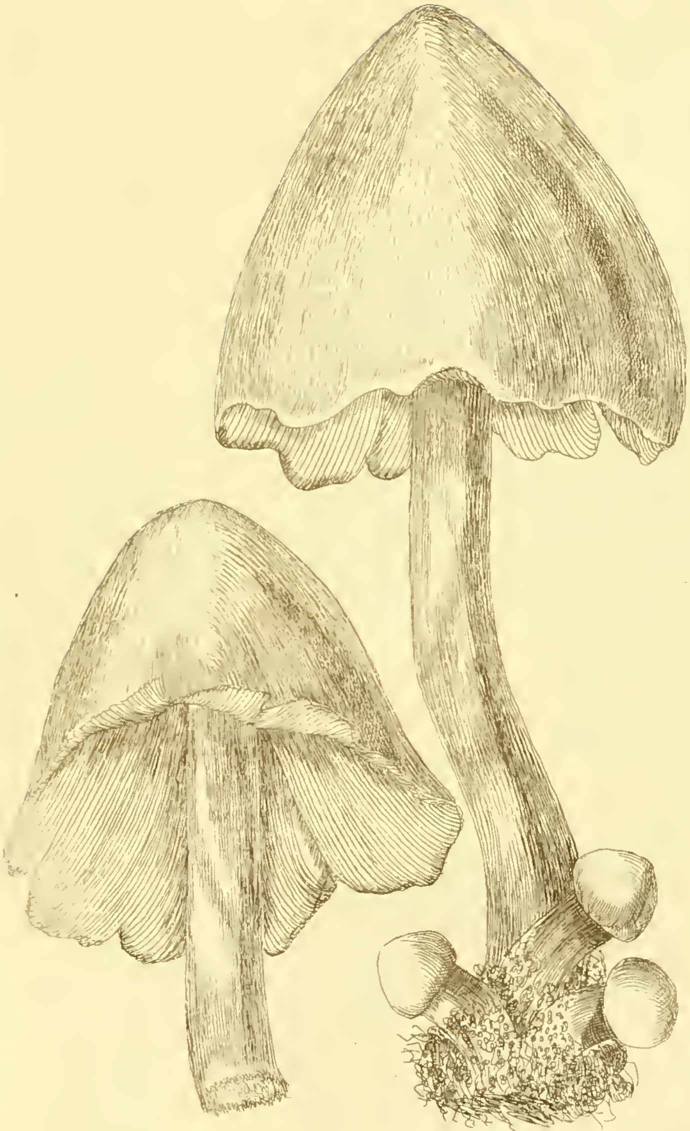

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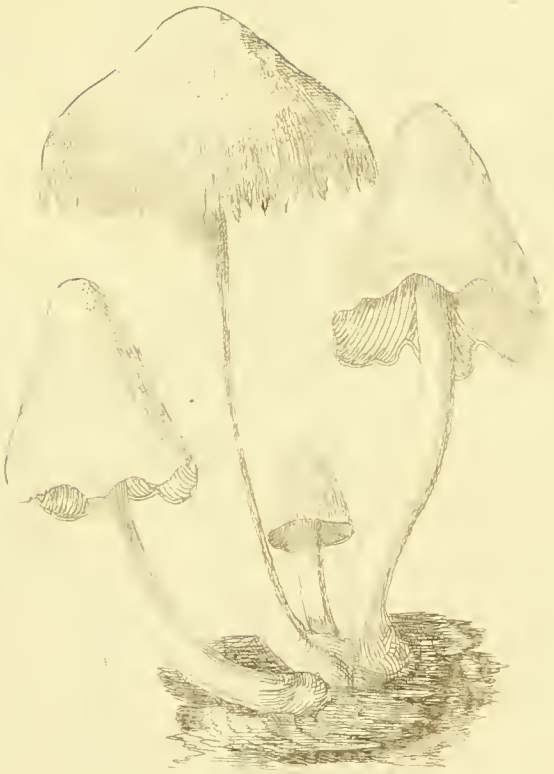


James Bolton del. et sculp.

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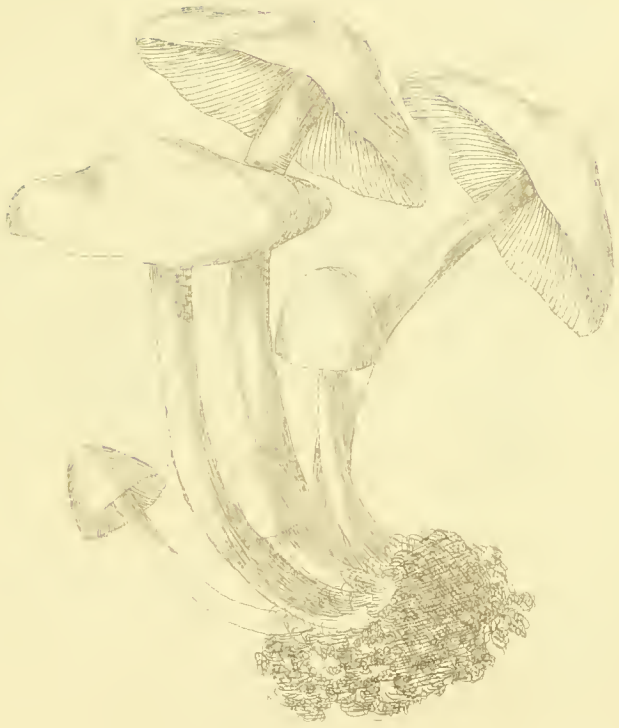

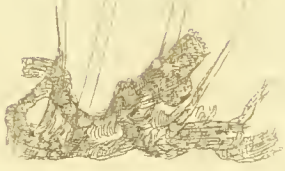

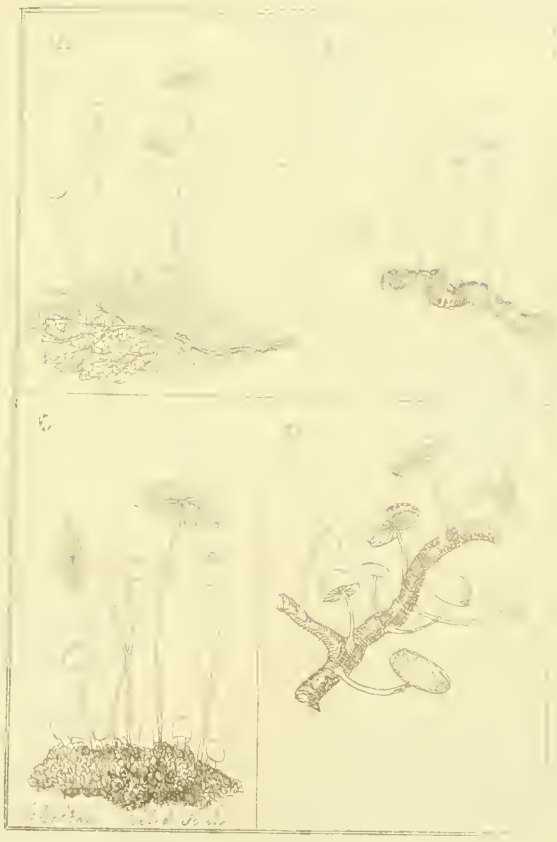


A

A N

H I S T O R Y

O F

F U N G U S S E S,

GROWING ABOUT

H A L I F A X.

W I T H

FORTY-EIGHT COPPER-PLATES;

ON WHICH ARE ENGRAVED

FIFTY-FOUR SPECIES of FUNGUSSES,

V I Z.

The Remainder of the AGARICS, with the Three ſucceeding GENERA, BOLETUS, HYDNUM, and PHALLUS:

Wherein their various Appearances in the different Stages of Growth, are faithfully exhibited in more than

TWO HUNDRED FIGURES,

Copied with great Care from the PLANTS, when newly gathered and in a State of Perfection.

With a particular DESCRIPTION of each SPECIES, in all its Stages,

From the firſt Appearance to the utter Decay of the Plant; with the Time when they were gathered; the Soil and Situation in which they grew; their Duration; and the particular Place mentioned, where all the New or Rare Species were found.

The Whole being a plain Recital of FACTS, the Reſult of more than Twenty Years Obſervation.

By J A M E S B O L T O N,
Member of the Nat. Hiſt. Society, at EDINBURGH.

V O L. II.

NATURA SEMPER EADEM.

HUDDERSFIELD:

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M,DCC,LXXXVIII.

1788

INTRODUCTION

CONTINUED.

THE *Halvella inflata* has, for ſeveral years paſt, grown plentifully in the plantations about *Fixby-Hall*, near *Huddersfield*; it makes its annual appearance in two or three particular places in thoſe fertile woods, and I never met with the plant in any other place, though I have often ſought it in ſimilar ſoils and ſituations.

The *Hydnum imbricatum*[a], has at its ſeaſon, for more than twenty years ſucceſſively, grown in one part of *North-Dean*, near *Halifax*: though I have very rarely ſeen it elſewhere in this neighbourhood.

Some of the paraſitic *Boleti* are perennial and abiding, growing and increaſing from year to year, as the *Boletus igniarius*[b], (and amongſt the Agarics the *A. quercinus*[c];) others which are of a more periſhable nature, and ſerve as food to the numerous brood of various kinds of inſects, I have found to grow annually from the ſame ſpot, as the *Boletus ſquamoſus*[d], and the *Boletus hepaticus*[e].

a Tab. 88.—b Tab. 80.—c Tab. 73.—d Tab. 77.—e Tab. 79.

The *Boletus elegans*[f], which was found in the hollow of an old elm tree root, in Auguſt, 1786, did not make its appearance there in 1787, but this preſent year 1788, on the 28th of July, another ſpecimen grew in the ſelf ſame ſpot; ſo that this ſpecies ſeems to be biennial in its nature.

Some ſpecies of *Fungi* are ſubject, from accidents, in ſoil, ſituation, and expoſure, to vary much in point of ſize: I have ſeen ſpecimens of the *Lycoperdon boviſta*, varying from the ſize of a walnut to that of a child's head, when the ſmall, as well as the large ſpecimen, had arrived at its full extent of growth.

July 18, 1788, the *Agaricus latus*[g] was brought me, in a ſtate of uncommon luxuriance. The pileus meaſured twenty-ſeven inches in circumference, the ſurface was waved, and the margin undulated; a gill of the firſt ſeries meaſured three inches and two lines in length, and ſomething more than one inch in breadth; the ſtem was near ſeven inches high, and about four in circumference; the ſeeds were of a brown colour, and ſpherical.

In September, 1787, I gathered a ſpecimen of the *Agaricus muſcarius*, which weighed thirty-one ounces and upwards, though the lower part of the ſtem and the root were wanting. Happily however, this inequality of ſize is not very productive of error in the detection of ſpecies; for the ſubſtance, texture, conſtituent matter, and generally the colour too, are often exactly ſimilar, and undergo the ſame mutations in the ſmaller, as in the larger ſpecimen.

In regard to the ſtems of Agarics, the circumſtances of ſolid and fiſtular, ſhould be attended to with caution, before they can be properly applied as diſcriminative characters; becauſe in many ſpecies the ſtem is ſolid in the firſt ſtages of growth, but becomes fiſtular, by degrees, when the plant arrives to its perfect ſtate; and, in the progreſs of decay, becomes

[f] Tab. 76.—[g] Tab. 2.

comes more and more hollow, till its final diſſolution. In deſcribing the plants, in this work, I have carefully noted theſe changes: but all ſtems of this kind are to be conſidered as ſolid, when that circumſtance is made uſe of, by way of ſpecific character; and where it is ſaid, that a ſtem is *ſolid*, it is meant, when the plant is in a ſtate of growth and vigour; when it is ſaid, that a ſtem is *fiſtular*, it is to be underſtood from its firſt appearance above ground.

I have endeavoured in all the figures, to give proper attention to the Roots of the Agarics; a part of them which ſeems to have been greatly neglected, though moſt of the ſpecies are furniſhed either with a proper, or a common root. It generally conſiſts of a tuberous piece, of a proportionable ſize, and a tough hard ſubſtance; which is, as it were, incorporated into the baſe of the ſtem, and emits fibres into the ground or other matter, for the ſupport of the plant. It is often, however, overlooked, for if the plant is not taken up with care, the baſe of the ſtem breaks, and the root, with its fibres, remains in the ground, and eſcapes our notice.

Figure, in the Pileus of Agarics, which has by many been conſidered as a character of ſpecific diſtinction, has been a ſource of much perplexity; the truth of this aſſertion will be obvious, when we conſider, that in many ſpecies the ſeveral *Terms*, globular, oval, convex, umbelicated, and funnel-ſhaped, may, with equal propriety, be applied to the ſame individual ſpecimen, in the various ſtages of its growth. Theſe mutations of figure are carefully noted throughout the work, both on the plates and in the deſcriptions; and where the figure of the pileus is brought in, as aiding to the ſpecific character, it is meant, to denote its figure when in a ſtate of perfect growth, or between the laſt exceſs of its increaſe, and the firſt approaches of its decay. Laceration or rents in the pileus, which are always a certain ſign of its approaching decay, are the effect of contraction in its ſubſtance, and depend in ſome meaſure on the dryneſs or moiſture of the air; for in rainy ſeaſons, when the plant can imbibe

imbibe a ſufficient ſupply of moiſture, it often falls and diſſolves without lacerating.

Colour, in Agarics, (eſpecially in the peruſal of ſuch authors as have given deſcriptions without figures) has been another ſource of much perplexity; for though the colours in the reſpective ſpecies are not very inconſtant, yet they are of ſuch mixed and indeterminate hues, and thoſe of one ſpecies ſo nearly verging upon thoſe of another, that it is little leſs than impoſſible, to convey clear and diſtinct ideas of them, by words alone, either in our own or any other language. For this reaſon I have been particularly careful in mixing the colours, both in making the drawings and colouring the prints, to imitate the preciſe hue of the object, as near as I poſſibly could.

The part of an Agaric which is extended from the ſtem to the rim of the hat, and which authors diſtinguiſh by the term *velo*, I have named in Engliſh *curtain* rather than *veil*; becauſe the latter has been already made uſe of, in our language, to denote an hood or covering on the fructification of moſt moſſes, which is of a quite different figure from the curtain of an Agaric, and of which the word *veil* contains a more apt *idea*.—The uſe of this part, in one as well as the other, is to ſecure and conceal thoſe hidden operations of nature, which are neceſſary to the production of perfect ſeeds; but in the moſſes it is a cloſe hood, in the Agarics it is an extended membrane.

The cover, which in ſome ſpecies ſurrounds the root, and inwraps the pileus in its infant ſtate, is by *Battarra*, *Scopoly*, *Schoeffer*, *Hallar*, and others, termed *volva*. The excellent *Linnaeus*, it ſeems, did not conſider the volva and curtain as diſtinct objects, for in the ſpecific characters of the *Agaricus muſcarius*, we find, *ſtipite volvato**; in the deſcription of *Agaricus extinctorus*; *baſi craſſus nudus abſque volva*†. The term Volva, is made uſe of in the preſent work, becauſe no Engliſh word occurred to me, which I thought equally expreſſive, of the figure and uſe of that ſurrounding

* Sp. Pl. 1640——† Flora Suecica 1196.

ſurrounding cover. *Spatha*, a ſheath, is now almoſt ſolely applied to the lily *narciſſus*, and other plants of the ſame, or a ſimilar ſtructure; *gluma*, an huſk, to the graſſes, &c. *involuerum*, *(involuere)* to a cover of a particular ſtructure, found on the top of the ſtems and branches of the *umbelliferous* plants, and ſerves as a defence to the umbells of flowers, whether univerſal, partial, or both.

In making choice of ſpecimens, I have throughout the work avoided ſuch as were uncommonly large, or ſmall in their kinds; and have drawn and deſcribed ſuch as were of a middling ſize, in reſpect to others of the ſame ſpecies. Often, when I have met with a plant in one ſtate only, whether young, middling, or otherwiſe, I have made an exact drawing in that ſtate; and finding the plant afterwards in a different ſtate, I have taken another figure, perhaps on the ſame or on a ſeparate paper, and have always accompanied theſe drawings with deſcriptive notes.—In the Drawing, I have all along endeavoured to give a faithful and accurate imitation of the object before me, and to repreſent Nature juſt as I ſaw her in herſelf, with her ſimplicity and accidents about her. From a ſelected choice of the above drawings, the figures on the plates were taken; and from thoſe deſcriptive notes, the deſcriptions were ſelected: and there is not one figure, nor one deſcription in the whole work, which was not originally drawn and written by my own hand, from an immediate inſpection of the reſpective object, when in a recent ſtate; and (except in a few inſtances) gathered, in the natural place of growth, by me.

The Etching of the plates, ſuch as it is, is wholly my own performance; and when a ſpecimen fell into my hands, at a time when I had an opportunity of etching it, I made the primary outline upon the copper without any previous drawing, I drew it on the waxed plate, with vermillion, in the point of a fine pencil; and when I copied drawings, I uſed the ſame method in laying the outline upon the plate; for beſides that it was more readily done, and more agreeable to me, it prevented thoſe injuries which the wax is liable to in back tracing; and preſerved

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an air of originality in the outline, which is not without great difficulty retained, under that hazardous and diſagreeable operation.

The Eſſay towards a methodical arrangement of the Agarics contained in this work, how imperfect ſoever in its preſent infant ſtate, may, I hope, be uſeful, in exciting the attention of ſuch of my friends in particular, or of Botaniſts in general, as have made ſome progreſs in the ſtudy of this perplexing, and extenſive branch of Natural Hiſtory.

The primary diviſions are founded in the diſpoſition and arrangement of the gills; the ſecondary, in the preſence or abſence of either the volva, or curtain, or both; and the ſpecific diſtinctions are drawn from the ſize, figure, colour, texture, &c. &c. of all the parts, both external and internal, combinedly. The neceſſity of this combination is the moſt perplexing part in the ſtudy of Agarics, and this perplexity muſt always remain:—for the parts are ſo ſimple and few, and the *Genus* ſo numerous, that it is impoſſible to affix ſingle ſpecific Diagnoſtics.—That a gradual and progreſſive arrangement or diſpoſition may exiſt, between all the created ſpecies of this *Genus*, I deny not, but this connection (till all the created ſpecies are known) we can no more diſcover, than we can write a compleat Hiſtory in any Language, and be denied the uſe of perhaps three-fourth parts of the characters, which conſtitute the Alphabet of that Language. The chain can never be compleated, while ſo many intermediate links are wanting.

In citing Authors, I have referred to ſuch figures or *ſynonyma* as I thought moſt proper, but did not think it neceſſary to ſwell the Book, by tranſcribing thoſe *ſynonyma*; many of them being already collected together, in Mr. *Hudſon*'s excellent *Flora*, and in moſt other ſimilar publications, as well as in this work, at the head of the reſpective deſcription of the plant, except in the new or undeſcribed ſpecies.

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HISTORY OF AGARICS,

GROWING about HALIFAX.

AGARICUS *ſtipitatus, pileo convexo ſquamato albido, lamellis rufis. Linn. Sp. Pl.* 1641. LII. *campeſtris.*

ESCULENT AGARIC, Muſhroom or Champignion.

TAB. XLV.

THE root is ſurrounded with numerous ſhort dawny fibres, of a greyiſh colour.

The ſtem is ſolid, brittle, cylindrical, and white; while young a little ſwollen in the middle, and is large and thick in proportion to the pileus.

The curtain is white, of a dawny or cottony ſubſtance, ſoon lacerates, falls off, and vaniſhes.

The gills in three ſeries, pointed at the baſe, not adhering to the ſtem; at firſt of a pale roſe colour, afterwards change to a brown hue, and turn black in decay.

The pileus while young is globular, generally ſmooth and white, ſometimes tinged with a pale brown, and having an appearance of ſcalineſs on its ſurface; as it advances in age the rim unfolds, till at laſt it becomes nearly horizontal, changes by way of buff colour to a duſky brown, and falls and withers in decay.

Grows in paſture grounds, after much rain, in *July* and *Auguſt*, not in plenty about *Halifax*.

This Agaric is in much requeſt at table, having an excellent flavour, and being accounted ſafe. There are inſtances, however, on record, of its pernicious and fatal effects upon ſuch as have eaten largely of it; but it may be aſked, whether thoſe bad effects were occaſioned by a poiſonous quality in the true muſhroom, or by an error or overſight in the gatherer? For the *Agaricus annulatus*, which is eſteemed poiſonous, ſo nearly reſembles the muſhroom in ſome of its ſtates, that I have ſeen it gathered, by miſtake, for that ſpecies. The *Agaricus vernalis* alſo, ſometimes, nearly reſembles it.

LIII. *nobilis.* AGARICUS *ſtipitatus, pileo hemiſphærico amplo coccineo, cum fragmentis niveis eleganter ornato, volva dupla, radicale lobata perſiſtante, pileana lacerata.*

NOBLE AGARIC.

TAB. XLVI.

THE root approaches to a bulb-ſhape, is white, and of a ſubſtance ſimiliar to that of the ſtem; it is ſurrounded with a thick white volva, which enwraps the whole plant in its infant ſtate, and abides till the decay of the plant.

The ſtem is firm, ſolid, brittle, cylindrical, white, upright, and four inches high.

The curtain is white, pretty firm, and has ſome degree of elaſticity; it ſeparates from the pileus all round the margin, and abides for ſome time like a white ruffle round the ſtem.

The gills are arranged in three ſeries, of a ſemi-oval ſhape, not adhering to the ſtem, of a pure white colour, and ſoft delicate ſubſtance.

The pileus is ſurrounded by a volva proper to itſelf, detached and ſeparate from the radical volva; this is a thin, light, white dawny epidermis or covering, which enwraps the ſubſtance of the pileus, while it is yet encloſed in the radical volva, and, after its eruption, is by the increaſe of the pileus torn in fragments, which are as white as ſnow, and remaining on its ſurface, give an elegant and pleaſing appearance to the plant.

The pileus is convex, the rim entire, the colour of its ſurface a fine, clear, bright, and glowing ſcarlet; is ſmooth, and feels like fine vellum; the ſubſtance of the fleſh is white, thick, and brittle.

This plant differs from the *Agaricus muſcarius*, in having a volva or covering proper to the pileus only, and in having the gills arranged in three ſeries.

The ſpecimen here figured and deſcribed, I gathered in a plantation at *Mills-Bridge*, near *Huddersfield*.

AGARICUS *ſtipitatus, pileo convexo cinereo verrucoſo, verrucis lamelliſque albis, ſtipite baſi bulboſo. Hudſon Ang.* 613, *No.* 11. LIV. *verrucoſus.*

WARTY AGARIC.

TAB. XLVII.

THE root, as in the laſt ſpecies, is a little ſwelled, or approaching to a bulb-ſhape, eſpecially while the plant is young; it is ſurrounded with a large, white, lobed, permanent volva, which emits a number of fibres from its baſe.

The ſtem is firm, ſolid, upright, cylindrical, of a brittle ſubſtance, and four or five inches high.

The curtain is white, tough, ſoft and dawny to the touch; it ſeparates from the pileus all round the rim, without being torn, and remains on the ſtem.

The gills are arranged in three ſeries, but variable in their reſpective lengths; they are deep or broad, white, ſoft, pliable, and numerous.

The pileus is globular at its firſt eruption from the volva, and cloſely covered with prominent warts, which are not the fragments of any volva, but of a ſubſtance ſimilar to that of the pileus, and grow thereupon; they are hard, of a firm texture, and on being forced from the pileus will break its ſurface; they increaſe proportionably with the plant in the progreſs of its growth, and at its maturity are eaſily ſeparable therefrom, leaving pale marks on the parts of the ſurface which they occupied.

The colour of the warts is a little paler than that of the ſurface of the pileus, both are of a browniſh duſky mouſe colour; the fleſh is thick, white, and brittle.

Grows in woods, about the roots of trees, but is a rare ſpecies here. The ſpecimen here repreſented, I gathered in the *Shroggs*, oppoſite *Birks-Hall*.

It differs from the *A. nobilis* and *A. muſcarius*, in that the inequalities on its ſurface are growing tubercles, and not looſe fragments.

LV. *vernalis.* AGARICUS *ſtipitatus totus albus, ſtipite bulboſo volvato, pileo hemiſphærico ſplendente glutinoſo, velo areneoſo manente.*

BULBOUS VERNAL AGARIC.

TAB. XLVIII.

THE root is a large globular bulb, of a ſoft ſpongy ſubſtance, white, and ſurrounded by a ſoft, white, bilobate volva.

The ſtem is ſolid, ſmooth, upright, white, ſoft, ſpongy, brittle, and three or four inches high.

The curtain is white, very delicate, while it is extended over the gills it appears like a thin dawny ſpider's web; after it is diſengaged from the rim it contracts, and abides on the ſtem for a ſhort time.

The firſt ſeries of gills lance ſhaped at both extremities, not adhering to the ſtem; they are interſected by a ſecond and third ſeries, irregularly; are white and of a thin and delicate ſubſtance.

The pileus is at firſt globular, at laſt hemiſpherical; the ſurface ſmooth as fine vellum, and covered with a ſlippery, ſhining glutin; the fleſh or internal ſubſtance is ſoft, white, and dawny.

I have ſeen a large variety of this ſpecies wherein the curtain was wanting, and the ſtem covered from to top to bottom with a kind of looſe cottony dawn.

Grows in woods about *Halifax*, both in ſpring and autumn.

I have named it *vernalis* rather than *bulbòſus*, becauſe HUDSON has already given the latter name to a very different ſpecies. —*It is of a poiſonous quality, and many have ſuffered by eating it. The moſt approved cure, according to* BULLIARD, *is firſt of all to take an Emetic, and afterwards ten or twelve drops of Vitriolic Æther in wine; if this ſhould not ſucceed, bruiſe a clove of Garlic in milk, and give it to the patient.*

AGARICUS *ſtipitatus, pileo pulvinato ſubviſcido margine integro ſtriato, lamellis minoris baſi truncatis,—volva lata lobata permanere, velo nulla.* LVI. *pulvinatus.*

CUSHION AGARIC.

TAB. XLIX.

THE root is bulbous, large, and ſurrounded with a large, thick, lobed, grey, dawny volva, which remains till the decay of the plant; it emits fibres from its baſe.

The ſtem ſolid, upright, round, ſmooth, and of a dead dark grey colour; it is thick and groſs at firſt, but decreaſes in thickneſs as it advances in height. There is no curtain.

The gills are arranged in three ſeries, and are ſtraight or even on the edges, making the under ſurface plain or flat; the firſt ſeries terminate in a point at the baſe, and do not adhere to the ſtem; thoſe of the ſecond and third ſeries are cut off at the baſe by a right line obliquely, by which peculiarity the ſpecies is at once diſtinguiſhed.

The pileus at firſt globular, and glutinous, afterwards becomes cuſhion-ſhaped and dry; the margin even, and ſtrongly ſtriated; the ſurface is of a clothy touch, and a kind of mixed browniſh mouſe colour; the internal ſubſtance white and ſpongy.

This ſpecies is rare about *Halifax*; it grows in woods, in ſhady moiſt places. The ſpecimen here deſcribed, I gathered in *Ramſden*, September 27, 1787; and have ſeen the plant in ſome other woods in this neighbourhood.

LVII. *luteus.* AGARICUS *totus luteus, ſtipite ſubbulboſo annulato, pileo obtuſo conico piloſo ſquamoſo, velo araneoſo, ſubſtantia ſicca.*

YELLOW COTTONY AGARIC.

TAB. L.

THE root is a misſhapen piece of fungous matter, covered with innumerable grey mouldy fibres, and produces numerous plants in ſucceſſion.

The ſtem is ſwollen or bulbous at the baſe, diminiſhing gradually upwards.

The curtain is extremely delicate and tender, breaks and vaniſhes while the plant is young; it originates in a dawny annulus or ring, which ſurrounds the ſtem, and abides after its diſappearance.

The gills arranged in one ſeries, numerous, lance-ſhaped, not adhering to the ſtem, the ſubſtance light, tender, and delicate.

The pileus cone-ſhaped, blunt at top, in its infancy wrapped up in a dawny volva or epidermis, which is proper to itſelf, and which is broken by the increaſe of its growth, and remains in little, ſoft, cottony tufts on the ſurface; the margin is irregularly waved and undulated, and in the laſt ſtages of the plant becomes ſtriated.

The whole plant is of a bright yellow colour, and of a dry, light, cottony ſubſtance.

The ſpecimen here figured and deſcribed, grew amonſt the bark in the pine-ſtove belonging to J. CAYGILL, Eſq; at *Sha*, near *Halifax*, in Auguſt, 1785.

AGARICUS *ſtipitatus, pileo ſubconico ſicco elaſtico, lamellis paucis trifidis, ſtipite prælongo gracili.* LVIII. *atro-rufus.*

LITTLE DARK-BROWN AGARIC.

TAB. LI. FIG. I.

THE root is a little round tubercle, the ſize of a rapeſeed, emitting a few dawny fibres.

The ſtem is cylindrical, filiform, dry, elaſtic, and of a brown colour. There is no curtain.

The gills are in three ſeries, few in number, tough, pliable, and of a reddiſh brown colour.

The pileus bluntly cone-ſhaped or convex, ſmooth, dry, and of a dark brown.

Grows in dry and barren paſture grounds, amongſt various kinds of moſs.

AGARICUS *ſtipitatus luteus, ſtipitis parte inferiore et pileo conico villoſis, lamellis albis numeroſis denſis.* LIX. *croceus.*

SAFFRON-COLOURED AGARIC.

TAB. LI. FIG. II.

THE root conſiſts of a multitude of dawny fibres, adhering to a misſhapen piece of fungous matter, which ſends up numerous plants in ſucceſſion.

The ſtem is round, upright, ſolid, three inches high, and the greateſt part thereof, as well as the whole ſurface of the pileus, is covered with a cloſe nap or hairy dawny covering, of a pale ſaffron colour, which ſerves the purpoſe of a volva to the pileus and ſtem, but does not enwrap the root.

When the rim of the pileus begins to unfold, the volva breaks, and the ſtem afterwards increaſing in length, is naked, and of a pale yellow above.

The gills are arranged in three ſeries, they are white and numerous.

Grows in the *Burks*, and other woods about *Halifax*.

LX. *violaceus.* AGARICUS *ſtipitatus, pileo rimoſo: margine violaceo tomentoſo, ſtipite cæruleſente, lana ferruginea.* *Linn. Sp. Pl* 1641.

VIOLET COLOURED AGARIC.

TAB. LII.

THE root is ſwelled, and approaching to a bulb-ſhape; it is firm, hard, ſolid, and ſends out many capillary fibres, of a pale brown colour.

The ſtem is of a pale purple colour, firm and ſolid, eaſily diviſible in fine, pale, purple, ſilky filaments, and near the root is covered with a ruſt coloured dawn.

The curtain is like a fine and tender ſpider's web, ſoon breaks and vaniſhes, leaving no remainder; it is of a browniſh ruſt colour.

The gills are arranged in three ſeries, but irregularly, they are deep, membranaceus, and gently waved on the edges; the colour is a violet blue, turning brown in decay.

The pileus at firſt hemiſpherical, afterwards convex; the rim a little waved; the ſurface ſoft and clothy to the touch; while young of a full violet purple colour, but changes to a pale brown or ruſt colour; this change firſt takes place at the centre of the pileus, and gradually prevails till the purple is quite loſt even to the margin; at laſt the pileus lacerates, and the whole diſſolves in a turbid ſtinking jelly, of a ſordid brown colour.

Grows in *Woodhouſe-Wood*, and ſome other woods about *Halifax*, in Auguſt and September, but not plentifully.

AGARICUS *ſtipitatus, pileo conico primo tecto pulvere niveo, poſtea glutinoſo, margine ciliata, lamellis trifidis nignis, ſtipite bulboſo.* LXI. *ciliaris.*

EYELASHED AGARIC.

TAB. LIII.

THE root is ſwollen ſo as to approach to a bulb-ſhape, and emits numerous black fibres.

The ſtem is hard, cylindrical, ſolid near the baſe, but fiſtular, with a ſmall perforation, near the top; it is round, ſmooth, firm, and five or ſix inches high; eaſily ſplits in fine ſlender filaments, is white, and ſometimes covered with a grey powder.

The curtain breaks and vaniſhes while the plant is young, leaving a grey indiſtinct annulus on the ſtem.

The gills are of a ſooty grey, arranged in three ſeries, irregularly; they are narrow at the baſe, and broad towards the external extremity, of a ſoft and tender ſubſtance.

The pileus while young (if the ſeaſon is dry) is covered with a ſnow white powder, the particles whereof glitter when viewed in the ſun, juſt like thoſe on the petals of a white lily, or a narciſſus:—this powder ſoon diſſolves, and covers the pileus with a ſlippery glutin; at full growth it is of a conical ſhape, blunt at top, of a pale kind of ſtraw colour, and a ſmooth vellumy ſurface. It is ſingular, in that the margin is extended beyond the extremity of the gills, and terminates in a ſhort black ciliation.

Grows moſt frequently on freſh dunghills; ſometimes I have ſeen it in paſture grounds.

It differs from *A. plicatus, ſtriatus, luridus, et ſimetarius,* in that the gills are in ſeveral ſeries, of unequal length; from the *A. clypeatus,* in magnitude, and in the blunt external termination of the gills; and from all others in the marginal fringe.

LXII. *ſtriatus.* AGARICUS *ſtipitatus, pileo campanulato fuſco ſtriato glabro, lamellis griſeis margine criſpis, ſtipite fiſtuloſo. Hudſon Angl.* 617.

STRIATED AGARIC.

TAB. LIV.

THE root conſiſts of a few fibres iſſuing from the bottom of the ſtem. Authors mention a taper root, running under ground, which I have not yet been able to diſcover.

The ſtem is upright, white, fiſtular, gently tapering from the root, and five or ſix inches high.

The curtain vaniſhes as ſoon as the rim of the pileus begins to expand, leaving an obſcure black mark on the ſtem, which ſoon vaniſhes.

The gills are all of equal length, broadeſt in the middle, and gradually diminiſhing to each extremity, where they are pointed; they are grey in the firſt ſtages of the plant, turning black in decay. In large ſpecimens, when juſt ready to fall, the ſeeds are ſometimes viſible to the naked eye, lying like a red powder, on the edges of the half-diſſolved gills.

The pileus is of an oval-ſhape, with one end lopped off; the rim is lobed and much contracted; the ſurface ſtrongly ſtriated, from the verge to near the ſummit, where it is ſmooth; the colour is generally a reddiſh brown, ſometimes it inclines to an aſh colour; and in very damp places, I have ſeen the pileus in young plants covered with pellucid grains, which, when rubbed off, feel ſharp between the fingers.

The plant varies greatly in various ſoils; ſometimes it grows ſingly on the ground, is large, and of a red brown; ſometimes in vaſt cluſters upon wet decayed wood; and is of a pale brown, aſh colour or grey;—the whole at laſt diſſolves in a black liquor.

AGARICUS *ſtipitatus, pileo convexo margine involuto, lamellis trifidis decurrentibus, ſtipite adſcendente.* LXIII. *adſcendentibus.*

CURVED AGARIC.

TAB. LV.

THE root is hard, of a dark brown, ſends out many black, hard, ſhort fibres, and ſuſtains one plant only.

The ſtem is hard, ſolid, of a browniſh ſnuff colour, and about three inches high; it grows on the perpendicular ſurface of the broken earth, beſides deep lanes and pathways in woods; it grows at firſt horizontally, and then curves gradually upwards.

The gills are in three ſeries; thoſe of the firſt running down the ſtem, in a narrow pointed baſe; they are numerous, of a dry pliable ſubſtance, and a pale brown colour.

The pileus is convex from firſt to laſt, very much rolled in at the margin, where it is ſmooth and entire;—a little above the margin, on the moſt prominent part of the pileus, all round about, is a band or belt of a velvety ſurface; it is about one fourth of an inch in breadth, more or leſs, in proportion to the ſize of the ſpecimen;—above this, on the top or upper part, the pileus is ſmooth, and ſhines as if it were glazed:—the ſubſtance of the whole is hard, dry, and brittle; the colour a reddiſh brown.

This plant agrees with the *A. lactifluus* in ſome particulars, but differs from it in having the ſtem conſtantly curved, in the velvety belt on the pileus, and in that the whole is of a dry ſubſtance, and yields no milk.

Grows in the *Burks*, and other woods about *Halifax*, in September and October.

LXIV. *fulvoſus.* AGARICUS *ſtipitatus, pileo convexo fulvo glabro, lamellis trifidis remotis craſſis decurrentibus, ſtipite ſolida baſi acuminata.*

FULVOUS AGARIC.

TAB. LXIV.

THE root conſiſts of a few fibres, iſſuing from the pointed termination or origin of the ſtem; the part from which theſe fibres iſſue, in this as well as moſt other Agarics, is covered with a mucor-like dawnineſs, which poſſibly may be the remains of a volva, which covered the plant when in a ſtate of embrio, too minute for our obſervation.

The ſtem is round, upright, ſolid and firm; it is eaſily divided into fine ſlender filaments, of a ſhining white; it tapers near the root, where it terminates in an obtuſe point; it is a pale kind of buff colour, nearly white.

The gills are in three ſeries, groſs, remote, arched, and adhering to the ſtem by a broad decurrent baſe; the colour is a pale, pleaſant, fulvous brown.

The pileus is of a globular ſhape at firſt, in the progreſs becomes hemiſpherical, and laſtly horizontal; ſometimes the rim rolls back, ſo as to ſhew the points of the gills all round, on the upper-ſide; the colour is at firſt a bright fulvous brown, growing paler as it advances in age, and in decay changes to a pale dirty white; the ſurface is ſmooth and ſilky to the touch.

Grows in dry and barren paſture grounds about *Halifax*, in September and October.

AGARICUS *ſtipitatus, pileo hemiſphærico viſcido, acuminato, lamellis albis, ſtipite longo cylindrico albo. Sp. Pl.* 1642. *No.* 16.—*Hudſon Angl.* 691. LXV. *clypeatus.*

SHIELD or BUCKLER AGARIC.

TAB. LVII.

THE root is a little, oblong, hard tubercle, emitting a few black fibres.

The ſtem is hard, ſlender, cylindrical, the thickneſs of a duck's quill, and five or ſix inches high; it is ſolid, and covered with a whitiſh grey powder at firſt, afterwards it becomes fiſtular, and changes to a dark brown or blackiſh colour; the ſurface is ſmooth, and the ſubſtance eaſily divides in filaments like hemp.

The curtain is white, vaniſhes and diſappears while the plant is young.

The gills are arranged in three ſeries; thoſe of the third adhering to the ſtem by a broad baſe, the reſt pointed at each extremity, and broad in the middle; they are numerous, and of a thin, pliable, and very delicate ſubſtance; the colour at firſt a greyiſh white, turning black in the progreſs.

The pileus is hemiſpherical, ſometimes terminating in a ſhort conical apex; it is ſmooth, and while young of a dead white, and covered with a ſlippery glutin; when old it becomes dry, and changes to a browniſh mouſe colour; in decay the rim lacerates, and the whole turns black and diſſolves. In dry ſeaſons, I have ſometimes ſeen the rim roll upwards, without breaking, and ſhew the points of the gills all round, on the upper-ſide.

There is a variety of this very frequent in meadows in this neighbourhood, which is throughout of a yellowiſh brown or buff colour.

LXVI. *peronatus.* AGARICUS *ſtipitatus, pileo hemiſpherico ſubpellucido, lamellis trifidis paucis anguſtis pellucidis, ſtipite parte ſuperior glabro, inferior lanuginoſo, baſi arcuato.*

SPATTERDASHED AGARIC.

TAB. LXVIII.

THE root is flat, compreſſed, crooked or bowed, and adheres by numerous fibres to heaps of fallen decaying oak leaves, in moiſt and putrid places.

The ſtem is ſolid, firm, and tough; of a pale ſtraw colour, and three inches high: the upper part is cylindrical and ſmooth, but from the middle downwards, it is ſurrounded with an erect cottony dawn or woollineſs, of a bright yellow colour,—which not unaptly reſembles the ſtraw *ſpatterdaſh*, worn in time of ſnow by the mountaineers in *Yorkſhire*.

The gills are in three ſeries, few, thin, and narrow; thoſe of the firſt ſeries adhering to the ſtem by a narrow baſe; they are of a pale watery ſtraw colour, and pellucid.

The pileus is hemiſpherical, acute at the rim, where it becomes waved when old; it is thin, ſemipellucid, and deſtitute of fleſh; the ſurface feels clothy to the touch, and appears to the eye like a mixture of brown and white wool.

It is a rare ſpecies here; grows in the deep and moiſt parts of woods, amongſt the fallen oak leaves. The ſpecimens here figured and deſcribed, grew in a little wood, called *Trough of Bolland*, in *Northowram*, near *Halifax*, September 10, 1787.

AGARICUS *ſtipitatus, pileo et lamellis livido fuſcis, centro umbilicate margine deflexo, ſtipite baſi craſſiore. Dixon Cript. P. 16. T. 3. F. 1.* LXVII. *ſordidus.*

SORDID AGARIC.

TAB. LIX.

THE root or baſe is a little thicker than the ſtem; it is hard, of a dark brown colour, and emits a few black fibres.

The ſtem is cylindrical while young, ſolid, and of a pale brown colour; afterwards becomes fiſtular, and changes to a dark ſordid brown.

The gills are in three ſeries, thin, narrow, and arched; thoſe of the firſt ſeries touching the top of the ſtem with a narrow baſe; they are pliable, tough, of a duſky brown, tinged with a fleſhy hue.

The pileus is at firſt convex, a little waved round the rim; afterwards it becomes horizontal, next umbilicated in the centre, and laſtly funnel-ſhaped; the ſurface is ſmooth, feels to the touch like vellum, ſhines a little, and is of a darkiſh mouſe colour when at maturity; it is thin of fleſh; the ſubſtance tough and leathern; it abides for a long time, and turns quite black in decay.

Grows in low meadows, where the graſs is deep and the ſoil rich; it is a late ſpecies, being moſt plentiful in November and December.

To ſeveral drawings of this Agaric, which I have formerly made for my friends. I put the trivial *pezizoides*, but to avoid confuſion, have here made uſe of *ſordidus*, as given by my friend DICKSON.

LXVIII. *acris.* AGARICUS *ſtipitatus, pileo diſtorto mutante, fuſceſcente, lacteſcente, lamellis trifidis, ſtipite compreſſo ſulcata, baſi anguſto.*

GREY PEPPER AGARIC.

TAB. LX.

THE root conſiſts of a few fibres iſſuing from the contracted baſe of the ſtem.

The ſtem is often crooked or leaning, it is compreſſed, ſulcated, and uneven; largeſt at top, and diminiſhing downwards; it is firm and ſolid while the plant is young, when old it becomes fiſtular; it grows ſingle or ſolitary, and is conſtantly of a pale greyiſh buff colour.

The gills are arranged in three diſtinct ſeries; the firſt ſeries about forty-five in number; they adhere to the ſtem by their baſe, are narrow, membranaceous, thin, and brittle; the colour is a pale buff, with a tinge of fleſh.

The pileus is two or three inches diameter, very various in its ſhape; it is convex, horizontal, or umbilicated; the margin frequently lobed or waved, and ſometimes deficient on one ſide; the colour is conſtant, being a kind of mixed grey, between mouſe colour and buff; the ſubſtance of the fleſh is white and brittle.

When the gills, pileus, or ſtem, are wounded, there iſſues a white milky fluid, of a hot acrid taſte. This milk, when dried in drops, becomes a browniſh gum, but retains little of its acrimony.

Grows in the ſhady parts of woods, but is rare in this neighbourhood. The ſpecimen above-deſcribed, grew in *Woodhouſe-Wood*, in Auguſt, 1787.

This is a ſpecies altogether different from the true *A. piperatus*. *See Vol.* I. *P.* 21. *T.* 21.

AGARICUS *ſtipitatus, pileo infundibuliforme margine elegantiſſime criſpato lobato fimbriato tenue albo ſemitranſparente, lamellis trifidis longiſſimis angaſtiſſimis pellucidis, ſtipite gracile breve.* LXIX. *fimbriatus.*

FIMBRIATED AGARIC.

TAB. LXI.

THE root conſiſts of a few fibres iſſuing from the bottom of the ſtem.

The ſtem is about an inch high, ſmooth, ſolid, tough, pellucid, and of a duſky watery white colour.

The gills are arranged in three ſeries, diſtinct, very long, very narrow, very thin and delicate; the ſubſtance is pellucid, tender, turning to a watery gelly, on being preſſed between the fingers; the colour a greyiſh watery white.

The pileus at its firſt appearance is convex, afterwards becomes horizontal, and when at maturity funnel-ſhaped; the margin at all times waved, lobed, curled, and undulated in the moſt elegant manner; the ſurface is ſmooth as vellum, ſhines a little, by means of a moiſture which is not glutinous, and is of the ſame colour as the ſtem and gills; the ſubſtance is thin, tender, and ſemitranſparent.

I have ſeen this plant in ſeveral ſhady moiſt woods about *Halifax*. The ſpecimen here deſcribed, I gathered in *Stump-Wood*, in *Northowram*, in Auguſt, 1787.

The ſubſtance and figure of this plant, diſtinguiſh it at once from all its congeners.—I find no ſatisfactory account of it in any author, ſince STEERBECK, who in his *Theater of Funguſſes*, *P.* 119, calls it *auricula leporis alba*, and has given two figures of it. *Plate* 15, *B. B.*

LXX. *chantarellus.* AGARICUS *ſtipitatus, lamellis ramoſis decurrentibus, Sp. Pl.* 1639.

CHANTARELLE AGARIC.

TAB. LXII.

THE root conſiſts of numerous dark-coloured hard fibres, by means whereof the plant is fixed pretty firmly to the ground.

The ſtem is ſhort, in proportion to the ſize of the plant; it is firm, ſolid, elaſtic, often compreſſed or ſulcated, of a golden colour without, and a pale yellow within; it is fibrous, eaſily ſplitting in thin filaments.

The gills are like threads on the under ſurface of the pileus; they are divided and ſubdivided, like nerves in often repeated ramifications, ſhooting ſmall lateral branches acroſs the intervening ſpaces, eſpecially near the margin; their ſubſtance ſeems to be the ſame with that of the pileus.

The pileus is of an irregular ſhape, lobed and curled in a rude and aukward manner, often deficient on one ſide, and variouſly diſtorted; the ſurface is ſmooth to the touch; the fleſh tough, a little elaſtic, and tears in filaments of a pale ſhining yellow.

The whole plant is of a fine gold colour, but in decay it changes to a ſordid brown, and at laſt diſſolves. While young it is devoured by ſnails and other inſects with great greedineſs.

It is in great eſteem, as an eſculent, in ſome countries, but is never admitted at table here, though it ſometimes grows in ſufficient plenty.

AGARICUS *ſtipitatus, pileo ſubcampanulato levi, lamellis ſtipitague violaceis. Hudſon Angl.* 612, 8. LXXI. *amethyſtinus.*

AMETHYST AGARIC.

TAB. LXIII.

THE root is brown, roundiſh, thicker than the ſtem, and furniſhed with a great number of grey dawny fibres, of a mould-like ſubſtance.

The ſtem is fiſtular, brittle, often crooked or bent in various directions, about the thickneſs of a gooſe quill, and is a little ſwelled juſt under the pileus; while the plant is young it is of a reddiſh purple, and covered with a bloomy dawn or powder, afterwards changes to a ſordid brown, becomes twiſted and ſometimes wrent; the height is four or five inches, and frequently three or four roots are entangled together by their fibres.

The gills are in three ſeries, irregularly waved on the edges, groſs, brittle, and few; they are broadeſt at their baſe, where they terminate in a claw, which is inſerted into the top of the ſtem, but in the laſt ſtages of the plant, when the rim of the pileus is elevated, the claw breaks, and the gills adhere to the pileus only; they are purple, and covered like the ſtem with a bloomy powder.

The pileus is deſtitute of fleſh, from one to two inches diameter; at firſt convex, the rim contracted and waved, afterwards becomes irregularly horizontal, at laſt the margin turns up, becomes lacerated, changes from a purple to a browniſh ſtraw colour, and at laſt falls and diſſolves in a brown turbid gelly.

Grows plentifully in moiſt, ſteep, rocky woods, about *Halifax*, and continues in ſucceſſion from Auguſt to November.

LXXII. *farinaceus.* AGARICUS *ſtipitatus, pileo convexiuſculo carneo fuſco, lamellis convexis diſtantibus incarnatis pulverulentis, ſtipite longo. Hudſon Angl.* 616, 26.

POWDERED AGARIC.

TAB. LXIV.

THE root is compreſſed, irregular, a little thicker than the ſtem; it is of a dark brown colour, hard, and firm, emitting mouldy grey fibres.

The ſtem is crooked, ſmalleſt in the middle, fiſtular, with a ſmall perforation, eaſily ſplits in filaments, is of a ſordid browniſh fleſh colour, and three or four inches high.

The gills in three ſeries, few, groſs, and brittle; the firſt ſeries about twenty in number; they are crumpled or waved on the edges, of a browniſh duſky fleſh colour, and, together with the ſtem, are covered with a mealy powder, of a pale greyiſh fleſh colour.

The pileus is convex, when full grown an inch and half in diameter, the rim gently waved; it is, like the other parts, of a browniſh fleſh colour, but not powdered; the ſurface is ſoft, and feels to the touch like fine woollen cloth wetted; the ſubſtance is thin, watery, and pellucid; the whole falls and rots, of a dirty brown colour.

It is not a common plant here. The ſpecimen before me, I gathered in *Old-Lane-Wood*, near *Halifax*; I have alſo ſeen it in *Woodhouſe-Wood*, and in the plantations about *Fixby-Hall*.

In number and figure this plant very much reſembles the *A. amethyſtinus*; I can find no character of diſtinction between them, except *colour*, and am therefore inclined to think, that this is no more than a variety of it; but as ſeveral *authors* have conſidered it as a diſtinct ſpecies, I have taken the liberty to give it a place in this Hiſtory.

AGARICUS *ſtipitatus, pileo pallido, diſco ſtellatini luteo, lamellis ſulphureis. Sp. Pl.* 1642, 13. LXXIII. *equeſtris.*

STARRY AGARIC.

TAB. LXV.

THE root is hard, brown, and globular; furniſhed with a multitude of brown capillary fibres; it ſuſtains one plant only.

The ſtem is upright, ſmooth, cylindrical, fiſtular, and four inches high; the ſubſtance thin, delicate, and eaſily ſplits in ſlender ſhining fibres or filaments; there is a fibrous or dawny matter in the perforation; the colour is a pale duſky yellow.

The gills regularly arranged in three ſeries, of a ſemioval ſhape, pointed at both extremities, and do not adhere to the ſtem; they are numerous, thin, pliable, delicate, and of a pale yellow with a tinge of green; ſulphur coloured.

The pileus is at firſt of an oval ſhape, afterwards convex; ſometimes the apex projecting in form of a blunt point; the colour is a pale kind of yellowiſh, with a caſt of buff, the apex a little darker:—when the plant is young the pileus is ſleightly glutinous, afterwards becomes dry and is ſmooth; in decay the rim changes to a duſky hue, which hue gradually ſhoots towards the middle in concentric points, forming the appearance of a yellow ſtar, of ten or twelve rays, in the centre; at laſt the whole becomes duſky, and falls and diſſolves, in about the ſpace of two days from its firſt appearance.

Grows in meadows and paſture grounds about *Halifax*, in July and Auguſt.

This plant ſeems nearly related to the *A. clypeatus*, and may poſſibly be a variety of it.

LXXIV. *varius.* AGARICUS *ſtipitatus, pileo conico obtuſo, colore vario cinorio griſeo ſive nigro, lamellis trifidis ſtipite filiforme.*

VARIABLE AGARIC.

TAB. LXVI. FIG. I.

THE root conſiſts of an hard tubercle, the ſize of a rape-ſeed; it is furniſhed with numerous ſhort fibres.

The ſtem is cylindrical, fiſtular, the thickneſs of a ſwallow's quill, white, but duſky near the root, and three or four inches high.

The gills are arranged in three ſeries, and run into a point at the baſe; the firſt ſeries adhering to the top of the ſtem by a ſmall claw.

The pileus is generally grey, but ſubject to great variety in its colours, being ſometimes aſh coloured, duſky pale brown, or of a full ſooty black.

Grows amongſt the graſs in paſture grounds, in October.

LXXV. *cuſpidatus.* AGARICUS *ſtipitatus, pileo conico acuto ruber-fuſco, lamellis ſubfuſcis baſi anguſtis, ſtipite fiſtuloſo.*

POINTED AGARIC.

TAB. LXVI. FIG. II.

THE root is a round hard tubercle, furniſhed with numerous fibres.

The ſtem cylindrical, ſmooth, upright, hard, of a browniſh hue, and four or five inches high; it is fiſtular, with a very ſmall perforation, and eaſily ſplits in fine filaments.

The gills are in three ſeries, of a pale duſky brown, a thin pliable ſubſtance, and pointed at the baſe.

The pileus is acutely cone-ſhaped, the rim even and entire, the ſurface ſmooth, and ſilky to the touch; of a pretty reddiſh brown, inclining to a cinnamon colour.

Grows in fallowed fields, where the weeds have been burnt, in woods, or places where charcoal has lately been made.

AGARICUS *ſtipitatus, pileo convexo pallide luteo, lamellis trifidis numeroſis profundis ſtipite ſolido fragile, velo fugaceo.* LXXVI. *durus.*

HARD AGARIC.

TAB. LXVII. FIG. I.

THE root conſiſts of a number of fibres iſſuing from the hard compreſſed bottom of the ſtem.

The ſtem is round, ſolid, two inches high, and of a pale whitiſh buff colour.

The curtain is very delicate and tender; it is white, and breaks and vaniſhes in the infancy of the plant.

The gills are extremely numerous, deep, ſemioval, and regularly arranged in three ſeries; they are thin, and of a pale greyiſh colour.

The pileus is convex, even, and ſmooth at the rim; the ſurface ſmooth, of a pale duſky yellow, and feels like vellum; the ſubſtance of the whole plant very hard and brittle.

AGARICUS *ſtipitatus, pileo convexo viſcido aurentio, lamellis luteis, ſtipite nudo. Lightfoot, Scot.* 1025. LXXVII. *aurentius.*

CHERRY AGARIC.

TAB. LXVII. FIG. II.

THE root is hard, compreſſed, of a browniſh colour, and furniſhed with a few fibres.

The ſtem often compreſſed and crooked; it is hollow, of a thin ſubſtance, eaſily ſplitting, of a pale yellow within, and a golden or orange colour on the outſide.

The gills are in three ſeries, remote, of a tender ſubſtance, terminating in a narrow point at the baſe, and varying in colour from a pale yellow to an high orange.

The pileus irregularly cone-ſhaped or convex, of a brittle ſubſtance, glutinous, and when young of a full bright cherry colour, turning pale as it advances in age.

Grows in dry and barren paſtures, frequent, about *Halifax*.

LXXVIII. *laceratus.* AGARICUS *ſtipitatus, pileo ſubconico pallide-ſtavo margine lacerato, lamellis trifidis latiſſimis baſi anguſtis, ſtipite fiſtuloſo contorto.*

RENT AGARIC.

TAB. LXVIII.

THE root, as in moſt others, conſiſts of a tuft of ſlender ſoft fibres, iſſuing from the bottom of the ſtem.

The ſtem is as thick as one's little finger, of a pale clay colour; the ſubſtance is thin, and readily ſplits in ſlender fibres; it is often compreſſed, ſulcated, or twiſted, and is three or four inches high.

The gills are irregularly arranged, ſometimes there are three ſeries, ſometimes only two; they are extremely broad towards the external extremity, and run out into a narrow point at the baſe; they are a little waved at the edges, of a tender ſoft ſubſtance, and a pale, greeniſh, yellow hue, or primroſe colour; preſſed between the fingers they turn to a ſlippery gelly, of no unpleaſant ſmell.

The pileus is obtuſely cone-ſhaped; the ſurface a pale yellow, dry, ſmooth, ſilky, and ſhining; when at maturity it ſplits or lacerates, the rents reaching almoſt to the centre, the diviſions riſing up at the rim, and abiding for ſome days in an horizontal poſition; it is deſtitute of fleſh, and diſſolves in decay.

Grows on dry banks and in barren paſtures about *Halifax*, but rarely.

Though this plant is ſometimes deficient in the third ſeries of gills, it will nevertheleſs arrange with thoſe of three ſeries, becauſe it is found with three more frequently than with only two; every ſpecimen having more or fewer of a third ſeries in it, and ſometimes all three compleat.

AGARICUS *ſtipitatus, pileo convexo acuminato griſeo, lamellis convexis griſeis crenatis ſtipite nudo. Sp. Pl.* 1642, 15. LXXIX. *mammoſus.*

BREAST AGARIC.

TAB. LXIX.

THE root conſiſts of black hard fibres, iſſuing from the obtuſe baſe of the ſtem; it is ſolitary, and ſuſtains one plant only.

The ſtem is upright, round, hard, firm, and ſolid; of a grey brown above, paler near the root; half an inch in diameter, and four or five inches high; the ſubſtance within is white, and eaſily ſplits in fine ſlender filaments.

The gills are arranged in three ſeries, very broad, of a pellucid ſubſtance, and a pale duſky grey, with a tinge of fleſh colour: their figure approaches to a ſemicircle, the baſe not touching the ſtem; they are waved on the edges near the extremity; near the baſe they are crenated. In the ſpecimen before me, there is one manifeſt dent or tooth towards the baſe, in thoſe of the firſt ſeries; in thoſe of the ſecond and third no dent or tooth, but only a gentle waving.

The Pileus is convex, terminating in a nipple-like beak or point at top; the colour is conſtantly of a duſky grey, with a tinge of reddiſh brown; and the ſurface looks and feels like fine woollen cloth: it is about three inches diameter in a full grown plant, and is deſtitute of fleſh, except juſt under the beaked top where the ſtem is inſerted; it diſſolves in decay.

This ſpecimen grew in *Bracken-Bed-Wood*, near *Halifax*, September 1, 1787.

LXXX. AGARICUS *ſtipitatus, pileo globoſo caſtaneo, margine lobata incurvo, lamellis trifidis undulatis, ſtipite gracile albo fiſtuloſo.*
nuceus.

HASLE-NUT AGARIC.

TAB. LXX.

THE root is an hard tubercle, furniſhed with fibres of a mouldy grey colour.

The ſtem is upright, fiſtular, of a pale dead white, and about the thickneſs of a crow's quill near the root, growing gradually ſmaller upwards; the height is about four inches; the ſubſtance thin, tender, and eaſily ſplitting in ſmall ſhining filaments.

The gills are arranged in three ſeries; they are broad and thin, gently waved on the edges, and touch not the ſtem with their baſe; the ſubſtance is thin and delicate, and the colour a pale pretty brown.

The pileus the ſize and colour of a Spaniſh haſle-nut; the top umbilicated, the margin lobed and very much rolled in, ſo as to touch the ſtem, or even to paſs by it; the oppoſite lobes preſſing againſt, or lying over each other. It is deſtitute of fleſh, of a dry pliable ſubſtance, and a ſmooth, dry, ſilky, ſhining ſurface.

This ſpecies came up in abundance, amongſt the young fir trees in the new plantation near *Mount Pellon*, in October, 1787; I have ſeen it in other places, in dry and barren ſoils, amongſt heath and furze buſhes.

AGARICUS *ſtipitatus, pileo campanulato obtuſo fuſco-flaviſcente, lamellis atro-griſeis, ſtipite fiſtuloſo griſeo villoſo. Hudſon Angl.* 619, 36. LXXXI. *aquoſus.*

WATERY AGARIC.

TAB. LXXI. FIG. I.

THE whole plant, while young, is wrapped up in a ſoft dawny covering, which breaks and falls off, when the ſpecimen has acquired about half its height; it firſt vaniſhes on the pileus, abiding longer on the ſtem, to which it gives a woolly appearance.

The ſtem is an inch high, fiſtular, and of a duſky white.

The gills are in three ſeries, white at firſt, and turning brown in decay.

The pileus is glutinous, bell-ſhaped, of a pale duſky yellow, and ſmooth ſurface; the whole plant is of a tender, watery, pellucid, ſubſtance.

In 1784, ſpecimens of this plant, in an advanced ſtate, were brought me, growing on putrid wood, found under the ſprinklings of the ſtream of *Elm-Cragg-Well*, at *Bell-Bank*, near *Bingley*; and I ſaw it in the ſame place, in all its ſtates, in April, 1788.

Agarics, halved, not ſupported on a central ſtem.

AGARICUS *ſubſtipitatus, pileo albido levi, lamellis ſubſimplicibus pallidis ſtipite laterali. Hudſon Angl.* 624, 51. LXXXII. *lateralis.*

LATERAL AGARIC.

TAB. LXXI. FIG. II.

THIS plant adheres ſometimes by the ſide of the pileus, ſometimes by a ſhort lateral foot-ſtalk to decaying branches and trunks of trees.

The pileus is convex, ſmooth, and of a pale duſky buff colour; the ſize is from one to two inches diameter; the ſubſtance tough and elaſtic.

The gills in young plants ſimple, in thoſe of older growth bifid; they are numerous, tough, and of a pale browniſh buff colour.

The figure on plate 71, is an exact repreſentation of the plant, as it grew on the decaying ſtock of an elm tree, in Auguſt, 1779.

LXXXIII. *betulinus.* AGARICUS *acaulis coriaceis villoſus margine obtuſo, lamellis ramoſis anaſtomoſantibus. Sp. Pl.* 1645.

BIRCH AGARIC.

TAB. LXXII. FIG. I.

THIS adheres to putrid wood, ſometimes by one ſide of the pileus, but more frequently by a ſhort lateral foot-ſtalk, which gradually expands into the ſubſtance of the pileus. It grows ſolitary, or in imbricated cluſters.

The pileus circular, but deficient on the radical ſide; it is ſhaped juſt like a leaf of the *Soldonella alpina*; the ſurface covered with a buff-coloured cottony dawn; the margin blunt, and rolled in.

The gills very numerous, thin, and narrow; divided and ſubdivided, in numerous fine and almoſt imperceptible branches. In old ſpecimens, the margin ſometimes becomes lobed and gaſhed, and the colour changes to a duſky brown.

It is of a tough elaſtic ſubſtance, and abides the year round.—Grows in *Woodhouſe-Wood*, &c.

LXXXIV. *flabellatus.* AGARICUS *acaulis parvis niveis, lamellis ſimplicibus.—Amanita ſeſſilis, minimus albus. Hall. Hiſt.* 2335.

WHITE FAN AGARIC.

TAB. LXXII. FIG. II.

THIS adheres by a claw, like the beak of a bevalve ſhell, to the ſtalks of withered plants, or the blades of graſs in moiſt and putrid ſituations; the upper ſurface is convex at firſt, and when magnified appears dawny; when full grown becomes nearly flat and fan-ſhaped.

The gills are few, remote, and ſimple. The whole plant is white, and of a tender, watery, pellucid ſubſtance.

The ſpecimens here deſcribed and figured, I gathered in *Kebroyd-Wood*, in *Soyland*, near the *Brook*, in September, 1777; and have ſince ſeen it in ſeveral like places.

AGARICUS *acaulis erectus planus, lamellis trifidis lanceolatis.* LXXXV. *planus.*

FLAT AGARIC.

TAB. LXXII. FIG. III.

THIS is of a ſemicircular figure, the margin waved, the ſurface ſmooth, of a browniſh mouſe colour, and marked near the edge with three or four narrow concentric lines, of a darker colour.

The gills are arranged in three ſeries; they are thin, pliable, lance-ſhaped, and the ſame colour as the pileus. The ſubſtance is ſoft and tender.

Of this plant I found many ſpecimens, growing erect on the ground, in a ſteep field by the footway leading from *Elland* to *Mills-Bridge*, in October, 1787.

AGARICUS *acaulis, lamellis labyrinthiformibus. Sp. Pl.* 1648. LXXXVI. *quercinus.*

OAK AGARIC.

TAB. LXXIII.

THIS plant in the firſt ſtages of growth is of a circular figure, *a. b.* growing flat, with the gills upwards; the gills at this time are diſtinct and branched, their ſides united by ſmall lateral projections, which are hardly viſible to the naked eye: as it advances in growth a part of the ſide which has adhered to the wood, and is hairy, *c.* gradually ſeparates from it, and takes an horizontal poſition; after this the horizontal part continues to grow and increaſe, *d.* the other part ſerving it as a baſe: in proceſs of time, the ſmall lateral projections increaſe in growth, ſo as to be equal with the gills in height and ſubſtance, thereby filling up the interſtices, and transforming the gills into oblong pores. It varies greatly in ſize, from three to ten or twelve inches diameter, is perennial, of a woody nature, and a browniſh cork colour; when old the ſurface becomes ſmooth, *as at e.* and the concentric circles more eminent.

This plant makes the link by which the *Agarici* and *Boleti* are naturally united; and may with equal propriety be eſteemed the laſt of the one, or the firſt of the other.

END OF THE AGARICS.

NOMINA TRIVIALIA

AGARICI.

ENGLISH NAMES

TO THE

AGARICS.

A N

Eſſay *towards a* Methodical Arrangement

O F

A G A R I C S,

W I T H

References to the *Synonyma*, or Figures of Authors.

Such as are ſupported on a central ſtem (ſtipe), *and have the gills* (foldlets) *branchy.*

Trivial Name.	Plate.	
Chantarelle -	62.	GILLS ſquat, decurrent; ſtem ſolid, plant gold coloured. *Linn. Sp. Pl.* 1639. *Hudſon Angl.* 609.
Infundibuliformis	34.	Gills ſquat, grey; ſtem trumpeted, plant mouſe coloured. *Bulliard, P.* 208. *Ray* 19. *Schæf* 243, 212.
Piperatus -	21.	Gills raiſed, ſtem ſwollen, pileus (hat) funneled, plant white, brittle, milky. *Sp. Pl.* 1641. *Hudſon* 613, *Schæf.* 97. *Haller* 2339. *Battarra, T.* 17. *A.*

Such as have the gills in a ſingle ſeries.

Integer - -	1.	Plant white, or tinted with bright colours. *Sp. Pl.* 1640. *Hudſon* 611. *Hall. Hiſt.* 2373.
Trilobus - -	38.	Hat cheſnut coloured, gills broad outwardly, radical volva large, abiding.
Confertis -	18.	Small, conical, white, growing in numerous cluſters. *Hall. Hiſt.* 2345.
Pullatus - -	20.	Stem tall, white, fiſtular; hat at firſt grey, with a dawny covering, afterwards black, plaited, diſſolving; root tapering. *Bulliard* 88. *Scop.* 1483. *Schæf. T.* 100.

Trivial Name.	Plate.	
Extinctorius	24.	Plant white, hat extinguiſher-ſhaped, apex blunt, no curtain. *Sp. Pl.* 1643. *Hudſon* 617. *Hallar* 2342. *Battarra, T.* 27. H.
Luridus - -	25.	Hat ſmooth, glutinous; gills blue grey, ſtem ſolid. I find no apt ſynonyma.
Domeſticus -	26.	Stem white, fiſtular in bundles; pileus brown, at firſt having a dawny covering, which abides in fragments. *Schæf. T.* 17.
Fimetarius -	44.	Hat pyramidal, white, with growing ſcales; root bulbous, curtain vaniſhing.
Striatus - -	54.	Hat brown, oval, ſtrongly ſtriated; apex ſmooth, gills black, curtain vaniſhing. *Vaill. Paris, T.* 12. *F.* 10, 11. *Schæf. Fung. T.* 67, 68. *Hudſon*, 617.
Luteus - -	50.	Wholly yellow, ſtems bundled, tapering; curtain vaniſhing, annulus abiding, hat cottony, rim lobed. I find no agreeable ſynonyma.
Radiatus - -	39.	Small ſize, hat firſt conical, brown, afterwards flat, black, wheel-ſhaped, with rays. *Hudſon*, 621. I believe this plant to be what he intends by his *A. tenellus*; but his ſynonyma from *Pluk. Ph.* and *Ray Syn.* do not belong to it, for they evidently deſcribe a mucor.
Clavus - -	39.	Small ſize, hard, opaque, pileus orange coloured. *Hudſon* 622.
Umbelliferus	39.	Small, brittle, glutinous, water coloured, baſe dawny.

Such as have the gills diſpoſed in two ſeries.

Laricinus -	19.	Stems thick, white, united; pileus ſmall, cuſhioned, annulus dawny, curtain tough. *Schæf. T.* 25, or *T.* 74. *Battarra Fung. T.* 11. B, C, E, F. *Hallar Hiſt.* 2445.
Politus - -	30.	Pileus convex, gloſſy, green; curtain lacerating, gills ruſt coloured. *Curtis T.* 309. *Schæf. T.* 1. *Hall. Hiſt.* 2444. *Ray P.* 6. *No.* 30. *Steerbeck T.* 20. G.
Rigidus - -	43.	Pileus dark brown, rim rolled in, wrent, gills groſs, brittle, few; ſtem tall, middle ſwelling. *Schæf. T.* 87.

Campanulatus

Trivial Name.	Plate.	
Campanulatus	31.	Pileus belled, plaited, ſtriped; margin tufted, ſtem tall, curtain vaniſhing. *Sp. Pl.* 1643. *Hudſon*, 618. *Mich. Gen. T.* 75. *F.* 6.
Androſaceus	32.	Small ſize, ſtem tall, hard, black, ſhining, briſtle-like. *Sp. Pl.* 1644. *Hudſon*, 641. *Ray Syn.* 9. *Hall. Hiſt* 2351.
Candidus - -	39.	Pileus convex, ſubſtance dry, tough, abiding, on rotten ſticks, ſmall ſize. *Hudſon*, 620. *Ray Syn. T.* 1. *F.* 2. *Hall. Hiſt.* 3348. *Mich. Gen. T.* 74. *F.* 7.
Eburneus -	4.	Small ſize, pileus flat, whole plant white, tender, pellucid, periſhing on the ground. *Vaill. Paris, T.* 11. *F.* 22.

Such as have the gills arranged in three ſeries; having a volva on the root, and a curtain on the ſtem.

Muſcarius -	27.	Large ſize, ſtem tall, root ſurrounded by a lacerating periſhing volva, ſtem by an abiding curtain; colour of the pileus variable. *Sp. Pl.* 1640. Though the gills in this ſpecies are frequently in two ſeries only, yet as I have ſeveral times ſeen them irregularly interſperſed with thoſe of a third, it will more properly arrange with thoſe of three ſeries.
Nobilis - -	46.	Pileus a bright full Scarlet, with a ſnow-white lacerating epidermis or volva, peculiar to itſelf, and diſtinct from that of the root. *Steerbeck*, 215, *T.* 22. *F.* C.
Verrucoſus -	47.	Pileus mouſe coloured, with wart-like tubercles growing thereon. *Hudſon*, 613. *Schæf. T.* 91. *Mich. Gen. T.* 78. *F.* 2.
Vernalis - -	48.	Plant wholly white, pileus globular, glutinous, ſhining; root globular. *Bulliard, P.* 108. *Schæf.* 241. *ſed non viſcoſus. Hall. Hiſt.* 2353.

Such as have a radical abiding volva, but no curtain.

Pulvinatus -	49.	Pileus ſmooth, mouſe grey; margin ſtriated, ſecond and third ſeries of gills cut off at the baſe, by a right line obliquely.

Such as are deſtitute of a radical volva, and furniſhed with a curtain on the ſtem.

Trivial Name.	Plate.	
Annulatus	23.	Pileus bell'd, imbricated with growing ſcales; curtain abiding, root bulbed. *Hall. Hiſt.* 2371. *Steerbeck*, 77. *T.* 7. *F.* A. *Ray Syn.* 4. *Ag. procerus, Hudſon*, 612.
Criſtatus	7.	Pileus brittle, lacerating, tufts on the ſurface, ſmall, upright, growing, curtain vaniſhing.
Villoſus	42.	Pileus covered with an hard fox-coloured ſhag, ſtem naked, aſcending; annulus thick, dawny, abiding; curtain vaniſhing.
Pompoſus	5.	Orange coloured, root ſolitary, ſtem ſolid, increaſing upwards; fleſh thick, brittle; curtain lacerating.—I find no ſatisfactory account of this ſpecies.
Caſtaneus	10.	Stem white, fiſtular; pileus cheſtnut coloured, curtain white, lacerating.—I find no apt ſynonyma.
Irregularis	13.	Root ſolitary, pileus diſtorted, brown grey, centre beaked; gills broad, ſtem fiſtular, curtain grey, vaniſhing. *Bulliard, T.* 268.
Elaſticus	16.	Grows in bundles, ſtem tapering upwards, curtain abiding, plant dry, elaſtic, ſnuff-coloured. *Ray Syn.* 5. *No.* 23. *Hall. Hiſt. No.* 2432. *Scopoli*, 1468.
Durus	67.	Pileus cuſhioned or convex, buff-grey; gills very numerous, broad, thin, and grey; ſtem ſolid, ſhort, brittle.
Faſcicularis	29.	Grows in bundles, ſtem fiſtular, cylindrical; hat yellow, fleſhleſs; curtain ſoon vaniſhing. *Flo. Dan. T.* 890 *Schæf. T.* 49. *F.* 1, 3. *Bulliard*, 178. *Hudſon*, 615. *Ray, P.* 9. *No.* 50. *Steerbeck, T.* 25. F.
Campeſtris	45.	Pileus fleſhy, convex, white, changing brown; gills firſt roſe-coloured, changing brown-ſpeckled; ſtem ſolid, curtain thick, white, dawny, vaniſhing. *Sp. Pl.* 1641. *Hudſon*, 610. *Schæf. T.* 33. *Hall. Hiſt.* 2443.
Violaceus	52.	Pileus with much fleſh, violet-coloured, curtain ruſt-coloured, vaniſhing, a ruſt-coloured dawn near the root. *Sp. Pl.* 1641. *Hudſon*, 611. *Hall. Hiſt.* 2455.

Ciliaris

Trivial Name.	Plate.	
Ciliaris	53.	Pileus pale, ſemioval, rim extended, ciliated; gills grey, baſe pointed, third ſeries ſometimes wanting, ſtem white, fiſtular; baſe bulbed, curtain for a little while pendulous, ſoon vaniſhing. Is it the *A. Separatus*, of *Linnæus?*
Clypeatus	57.	Pileus convex, beaked, dark mouſe colour; firſt gills broad at the baſe, and growing to the ſtem; ſtem tall, ſlender, mouſe coloured; curtain ſoon vaniſhing.

Such as have no volva on the root, or curtain on the ſtem.

Aquoſus	71.	Small ſize, whole plant at firſt ſurrounded with a white dawny covering, afterwards gelatinous, pellucid, watery; gills not touching the ſtem. *Hudſon*, 691. *Vaill. Paris*, *T.* 12. *Fig.* 56.
Plumoſus	33.	Pileus and ſtem wholly covered with little plumy, growing, mouſe-coloured tufts. I find no account of this plant.
Croceus	51.	Pileus, and lower part of the ſtem, covered with a cloſe, yellow, dawny pile; upper part of the ſtem ſmooth, gills white.
Latus	2.	Pileus large, broad, fleſhy, dark mouſe colour; gills very broad, not touching the ſtem; ſtem ſolid.
Lactifluus	3.	Gills narrow, baſe broad, growing to the ſtem; ſubſtance hard, whole plant a cinnamon-grey, yields a white mild milk. *Hudſon*, 614. *No.* 14.
Denticulatus	4.	Pileus purple, pellucid; ſtem grey, gills thin, pliable, brown dents on the edges. I find no account of this plant.
Repandus	6.	Pileus flat, broad, pale; gills lanced, baſe lopped, ſtem fiſtular, twiſted, white, ſplitting.
Cornucopioides	8.	Stem hard, twiſted, in bundles, moſt decurrent; pileus lobed, tough, red brown.
Delicioſus	9.	Scarlet or orange-coloured, pileus flat, rim inflected, yields a yellow milk, of a mild taſte. *Hudſon*, 613. *No.* 13.
Membranaceus	11.	Pileus convex, gills broad, ſtem fiſtular, whole plant white, dry, light, flexible, papery.

Trivial Name.	Plate.	
Cæruleus - -	12.	Pileus cuſhioned, greeniſh blue, clothy; gills white, brittle; ſtem white, ſolid. *Viridis, Hudſon* 614. *Hallar Hiſt.* 2444. *Sterbeeck, T.* 5. *Fig.* C.
Serratis - -	14.	Pileus ſtrong, full purple, fleſhy, clothy, brittle; gills gold-coloured, ſerrated; ſtem gold-coloured, ſolid, brittle large. I find no account of this ſpecies.
Concineus -	15.	Pileus mouſe-coloured, glutinous; gills numerous, broad, very white; ſtem fiſtular, white. *Schæf. T.* 14. *Hallar Hiſt.* 2381.
Umbilicatus	17.	Whole plant tough, elaſtic, white; pileus umbilicated, gills few, narrow; ſtem ſmall, ſolid. *Schæf. T.* 39.
Cinnamoneus	22.	Pileus undulated, centre beaked, gills broad, ſtem increaſing upwards, ſolid; whole of a cinnamon colour. *Hallar Hiſt.* 2416.
Elephantinus	28.	Pileus convex, glutinous, pale; gills groſs, wax-like, brittle; ſtem big, ſoft, ſpongy, ſnow white; whole plant in decay changes colour, becomes hard, dry, charcoal-like. I find no deſcription or figure agreeing with this plant.
Fiſſus - - -	35.	Pileus olive-coloured, dry; apex brown, rim ſtriated, ſtem tall, ſtriped, fiſtular, cleaving. I find no account of this ſpecies.
Rubeus - -	36.	Whole plant dark red crimſon, ſtem tall, hard; baſe thick, gills numerous, tranſparent, beautiful. No true deſcription or figure of this ſpecies.
Tenuis - -	37.	Dead white, pellucid, diſſolving; ſtem brittle, dawny at baſe, very tall, very ſlender. *Bulliard, T.*
Mollis - -	40.	Pileus convex, fleſhy, pale; gills narrow, decurrent; ſtem ſoft, white, ſolid, bulbed; fleſh ſoft, dry, ſpongy.
Tortilis - -	41.	Very ſmall, in cluſters, brittle, hat red-brown, diſtorted; gills few, broad, fleſh-coloured. *A. frigilis Hudſon,* 620. *Schæf. T.* 230.
Purpureus -	41.	Pileus and upper part of the ſtem violet-coloured, lower part and gills white; ſmall ſize. No account of this.
Ceſpitoſus -	41.	Small, pellucid, horn-coloured, pileus diſtorted, rim dented, gills few, crumpled; in cluſters. *Vaill. Paris, T.* 11. *F.* 11.

Atro-

Trivial Name.	Plate.	
Atro-rufus	51.	Small ſize, dark brown, dry, tough, ſtem very ſlender, very tall. *Schæf.* 234. *Ray Syn. P.* 8. *No.* 41. *Gled. Fung. P.* 127. *No.* 25. *Var* H.
Adſcendens	55.	Stem aſcending, plant duſky brown, hard, dry; gills decurrent, pileus convex, margin contracted, a velvety ſtripe round its lateral extremity. Is it a variety of *A. lactifluus?*
Fulvus - -	56.	Pileus fulvous-coloured, hard, freſh, brittle; ſtem ſolid, hard, brittle; baſe pointed. No account of this.
Peronatus -	58.	Pileus thin, rim waved, lower part of the ſtem covered with a tall, yellow fawn. I find no account of this plant.
Sordidus - -	59.	Pileus funneled, ſordid brown; ſtem ſolid, gills diſtinct, whole ſubſtance tough, abiding. *Dickſon Crypt. P.* 16. *T.* 3. *F.* 1. *Ray Syn. P.* 6. *No.* 27.
Acris - - -	60.	Pileus grey-buff, ſhape variable; ſtem increaſing upwards, grey; gills diſtinct, yields a white milk, of an hot acrid taſte.
Fimbratus -	61.	Pileus funnel-ſhaped, margin lobed, undulated, curled, crenated, elegant; gills narrow, diſtinct; ſtem ſhort, whole plant pale, pellucid, thin, watery. *Sterbeeck, T.* 15. B.
Mammoſus -	62.	Pileus grey, brittle, highly beaked; gills waved and crenated; ſtem tall, grey, ſolid. *Sp. Pl.* 1642. *Hudſon*, 619.
Amethyſtnus	63.	Plant an amethyſt purple, pileus, diſtorted, fleſhleſs; ſtem tall, crooked; gills few, brittle, waved, diſtorted; theſe and ſtem, bloom powdered. *Hudſon*, 612.
Farinaceus -	64.	Pileus convex, diſtorted, pellucid; gills few, groſs, waved; ſtem crooked, tall; whole ſubſtance pellucid, watery, of a pale brown carnation colour, powdered with a pale bloom. *Hudſon*, 616. *Scopoly*, 1530. *Hall. Hiſt.* 2436.
Equeſtris -	65.	Pileus convex, ſtarred; rim acute, gills ſulphur-coloured, ſtem thin, fiſtular, ſmooth, pale, yellow. *Hudſon*, 616. *Sp. Pl.* 1643.
Varius - -	66.	Pileus ſemioval, brown, grey, or black, varying; gills deep grey, ſtem fiſtular, filiform, tall, white.

Cuſpidatus

Trivial Name.	Plate.	
Cuſpidatus	66.	Pileus acutely cone-ſhaped, red brown, ſmooth; ſtem ſmooth, tall, red-brown; gills pale, buff.
Aurentius	67.	Pileus cherry-coloured, glutinous; gills few, broad; baſe pointed, yellow; ſtem diſtorted, yellow; whole plant extremely fragile. *Lightfoot, Scot.* 1035.
Laceratus	68.	Whole plant pale yellow, very brittle; pileus lacerating, gills very few, very broad outwardly; baſe pointed, ſtem fiſtular, twiſted, ſplitting.
Nuceus	70.	Pileus globular, nut-brown, ſilky, top naveled; rim lobed, much rolled in; ſtem tall, white, fiſtular, tapering upwards.

Such as are not ſupported on a central ſtem.

Lateralis	71.	Pileus convex, ſmooth, duſky yellow; gills in two ſeries, on rotten wood. *Hudſon*, 624. *Ray Syn.* 25. *Hall. Hiſt.* 2337.
Betulinus	72.	Pileus dawny, margin rolled in, gills branched, ſubſtance elaſtic, grows in cluſters or ſingle, perennial. *Sp. Pl.* 1645. *Hudſon* 623. *Ray Syn.* 24. *Hall. Hiſt.* 2331.
Planus	72.	Flat, mouſe-coloured, growing on the ground, ſurface ſmooth, gills in three ſeries, diſtinct. *Hall. Hiſt.* 2334.
Flabellatus	.	Small, white, fan-ſhaped; gills few, ſimple, on putrid plants. *Hall. Hiſt.* 2335.
Quercinus	73.	Hard, woody, large, brown, perennial, at firſt gill'd, at laſt pored, on the under ſide. *Bulliard*, 352. *Battarra, T.* 38. G.

A N

HISTORY OF FUNGUSSES,

GROWING about HALIFAX.

GENUS II.

BOLETUS.

LXXXVII. *obliquus.* BOLETUS *acaulis lignoſus, poris obliquis roſtratis inæqualibus baſi adhæſius.—Agaricus acaulis coriaceus, lamellis ſimplicibus ſinuatis. Hudſon*, 623. *Agaricus coriaceus longiſſimus pectinatim inferne diviſus. Ray Syn. P.* 25, *No.* 26. *T.* 1. *F.* 5.

OBLIQUE BOLETUS.

TAB. LXXIV.

THIS conſiſts of a vaſt number of oblique unequal pores, which run together at their baſe, and form an hard, woody, or coriaceus cruſt, which ſtrongly adheres, by its whole breadth, to the branches of trees, when fallen, or in a ſtate of decay; it inſinuates itſelf into the ſubſtance of the dead bark, ſo as to become inſeparably united therewith, *as is ſeen in the upper figure at a.* ſometimes when old it paſſes quite through the bark, incorporating it into its own ſubſtance, and even enters into the wood.

It grows in patches various in ſize and figure, ſometimes round or oval, but more frequently of no determinate ſhape. The tubes round the margin are ſmaller, and of a darker colour; they are obliquely placed, and moſt commonly rent, broken, or deficient on one ſide; they generally increaſe in length, from the margin to the centre of the plant. The colour varies from white, by way of buff, to browns of various hues, and becomes almoſt black in decay. A ſmall part of the plant, as it appeared when a little magnified, is ſeen at *c.*

Grows in many woods about *Halifax*, and is perennial and abiding.

BOLETUS *acaulis ſuberoſus imbricatus flavus lævis, poris minutis teritibus. Lightfoot Scot. P.* 1031.—*Boletus acaulis coriaceus convexus lobatus flavus lævis, poris tenuiſſimis. Hudſon Angl.* 625. *Schoeffer Fung.* 131. LXXXVIII. *tenax.*

TOUGH BOLETUS.

TAB. LXXV.

THIS grows horizontally, on the ſides of trees, moſt commonly on living wood, in ſome cavity occaſioned by the lopping of a branch, or ſome other accident; it firſt appears like a large unequal tumour, of mixed colours; as it advances in growth, it begins to unfold and diſplay a number of thick tough lobes, which are imbricated, or rather folded one within another; for they are nearly of equal length, and adhere at the baſe, ſo as to be united into one ſubſtance.

The upper ſurface is convex, ſoft and ſmooth to the touch, and of a browniſh gold colour; ſometimes pale, ſometimes of a redder hue: on the underſide the lobes are convex near the baſe, but flat near the extremity. The ſubſtance is tough and coriaceus, while in a growing ſtate; left on the tree, it diſſolves in decay; dried, it becomes light, hard, and brittle.

The tubes are cylindrical, very numerous, and of a yellow colour.

It is a rare plant in this neighbourhood; the ſpecimen here figured and deſcribed, grew in a little wood at *Shibden-Hall*, near *Halifax*, in Auguſt, 1786.

LXXXIX. BOLETUS *acaulis lobatis coriaceis, lobis linguiformibus.*
elegans.

ELEGANT BOLETUS.

TAB. LXXVI.

THIS elegant plant grew in an upright direction; it conſiſted of ten or twelve principal lobes, which united near the root, and formed a kind of thick irregular ſtem, of a blackiſh colour, and an hard tough ſubſtance; theſe firſt or principal lobes increaſe in breadth, from the baſe to the extremity, where each is ſubdivided into three or four other lobes, of a roundiſh tongue-ſhape, blunt at the end, and a little waved on the edges.

Of the primary diviſions or lobes, thoſe in the centre are the ſhorteſt, thoſe on the outſide longeſt; ſo that the whole plant together forms a rude kind of funnel-ſhape. The upper ſurface appears to the eye to be a little ſcaly, but is ſmooth and velvety to the touch, and varies from a duſky brown to a kind of cinnamon colour.

The tubes, *at* B. are ſmall and very numerous, the pores round and white; while young they appear as if covered with a fine white velvety duſt, but on being touched immediately loſe the white, and change to a dirty brown. The internal ſubſtance, *at* A. is thin, white, and extremely tough; it eaſily divides in fine filaments, from the top of the lobes quite down to the root; which filaments immediately after their diviſion, on being irritated, ſeemed to exhibit motions juſt like thoſe of a muſcular fibre.

This plant grew amongſt the fragments of a decayed elm root, in *Croſs-Field*, at *Halifax*, in Auguſt, 1786, and again in the ſame place in July, 1788. I find no deſcription or figure properly expreſſive of this ſpecies. *The figure in Battarra, T.* 34. *Fig.* B. *which Hudſon cites for the Boletus coriaceus, ſomewhat reſembles my plant. Hudſon's B. coriaceus is the ſame with my B. tenax, but I think that my tenax and elegans are diſtinct ſpecies.*

BOLETUS *ſubacaulis planiuſculus lacerato-ſquamoſus flaveſcens, poris tetragonis. Hudſon Angl.* 626.—*Boletus juglandis. Schæf. Fung. T.* 101, 102. *Auricula flammea malchi. Ster. Fung. P.* 105. *T.* 13, 14. *Fig. omn.* XC. *ſquamoſus.*

SCALY BOLETUS.

TAB. LXXVII.

THIS grows from the ſides of trees, in a drooping direction, ſometimes in vaſt imbricated cluſters of various ſizes, from ſix to twelve inches in diameter, and adhering to the tree by one ſide, without any viſible footſtalk; ſometimes there is a viſible root, as in the plant before me.

In this ſpecimen there is a root, conſiſting of a roundiſh lump, the ſize of a cat's head; it is of a firm, compact, tough ſubſtance; white within, and a duſky brown on the outſide: on being cut it yields in drops from the wound, a tranſparent fluid, acrid to the taſte; from the root the ſtem contracts for about an hand's breadth, and then gradually ſpreads out into the ſubſtance of the plant.

The ſurface is of a pale yellowiſh brown colour, with numerous feather-like ſcales, which adhere to the ſurface, and are arranged in a kind of wild concentric circles. The root ſuſtained one principal plant, and two others much ſmaller, iſſuing out of the neck or footſtalk of the large one, as expreſſed in the figure. The large one meaſured from ſide to ſide, in the broadeſt part, twenty-two inches; from the baſe of the root to the extreme margin twenty-four inches; the internal ſubſtance is white, ſpongy, and greedily devoured by the *larvæ* of inſects.

The pores are very large and angular, conſiſting of an unequal number of ſides, the tubes ſhort and ſhallow.

This ſpecimen grew on an aſh tree, in *Skircoat*, near *Halifax*, July 24, 1787.

XCI. *albus.* BOLETUS *acaulis pulvinatus lævis, poris oblongis. Hudſon* 626.—*Boletus acaulis pulvinatus lævis, poris oblongis et rotundis. Lightfoot Scot.* 1036.—*An poliporus ſeſſilis convexo-planus farinoſus. Hall. Hiſt.* 2287 ?

WHITE BOLETUS.

TAB. LXXVIII.

THIS plant adhered by its baſe to the root of a poplar tree, which was in a decaying ſtate.

It is convex on the upper ſide, and about an inch in thickneſs near the baſe, growing thinner to the margin;—the convex part near the root is of a reddiſh colour, the reſt of a pure white, and appears to the eye as if it were rubbed with chalk. A portion of the ſurface, when magnified, appeared to be covered with a ſhort velvety dawn, which glittered like ſilver;—when the white dawn or powder was rubbed off, the ſurface was of a pale duſky fleſh colour. The margin is lobed, curled, and undulated, in a very pleaſing manner. The ſubſtance of the plant, within, is of a pale duſky fleſh colour, tough, and elaſtic.—One of the ſpecimens before me, meaſures ſix inches from ſide to ſide, and near four from the baſe to the fore margin; another is little more than half that meaſure.

The tubes are about two lines in length, they adhere together by their ſides, are of a tough coriaceus ſubſtance, and variable in ſize and figure. The pores very unequal; ſome round, others oblong or angular, ſome are long and waved, ſome large, others ſmall; but all of equal height.

This ſpecimen grew on the root of a fallen poplar, at *Copley-Hall*, near *Halifax*; it grew near the ſurface of the ground, and ſurrounded, with its ſubſtance, the graſſes and weeds that grew in its way.

BOLETUS *acaulis lævis, carnoſus ſanguineus mollis obſcure lobatus. Lightfoot Scot.* 1034. *Hudſon Angl. P.* 625. *No.* 5.—*Poliporus ſeſſilis ſanguineus craſſus mollis obſcure lobatus. Hall. Hiſt.* 2315.—*Agaricus poroſus rubeus carnoſus hepatis facie. Ray Syn. P.* 23. *No.* 21. *Mich. Gen. T.* 60. *Ord.* 1. *Battara, T.* 34. *Fig.* A. XCII. *hepaticus.*

LIVER BOLETUS.

TAB. LXXIX.

IT grows horizontally, in the cavities of living oak trees, adhering by a narrow baſe, and ſpreading out on each ſide, aſſumes an almoſt circular figure. The margin gently waved. The ſurface is liver-coloured, very ſmooth, and cold to the touch: in ſome ſpecimens there is a tinge of green mixed in the hue, eſpecially in the larger plants. It is convex near the baſe, on the upper ſide, but flat towards the margin:—the under ſide is more flat towards the baſe, convex and projecting at the margin. The ſubſtance or fleſh, within, is of a firm cloſe texture, of a liver colour, with veins and ſpots of white.

The tubes are cylindrical, very numerous, about three lines in length, of a pale yellow colour; as are alſo the numerous pores.

This is ſaid to be of the eſculent kind; I have found it to taſte almoſt like lamb's fleſh, but how far it is to be truſted I know not.

The ſpecimen now deſcribed, grew in an hollow cavity in the ſtock of a living oak tree, in the *Shroggs*, in *Ovenden*, near *Halifax*, October 27, 1785.

XCIII. *igniarius.* BOLETUS *acaulis pulvinatus lævis, poris tenuiſſimis. Sp. Pl.* 1645. *Hudſon Angl.* 625. *Poliporus convexo-planus duriſſimus cinnereus, infern albidus. Hall. Hiſt.* 2288. *Agaricus pedis equini facie, Tourn Inſt. P.* 562. *T.* 330. *Fig.* A, B. *Battarra, T.* 37. E. *Agaricum igniarium, agarici officinalis facie. Mich. Gen. P.* 118. *T.* 61. *Fig.* 1. *Boletus ungulatus fulvus et variegatus. Schæf. Fung.* 137, 138. *Fungus durus igniarius. Park,* 1323.

TOUCHWOOD BOLETUS, Spunk.

TAB. LXXX.

THIS grows horizontally, from the ſides of trees; its firſt appearance is in form of a convex tubercle, the ſize of a pea; it is then of a ſoft and yielding ſubſtance, and of a yellow colour: this globular or convex figure it retains, till it acquires the ſize of a ſmall wilding apple or crab; it is now more firm, of a darker colour without, but ſtill yellow within; and the tubes are not yet formed: as it advances in growth the baſe ſpreads laterally, a margin begins to project, and the tubes begin to grow on the underſide; they are ſo very fine and cloſe, that the pores cannot be diſcerned by the naked eye; while freſh they are of a yellowiſh colour. The upper ſurface is of various colours, ſometimes diſpoſed in concentric circles, grey, brown, duſky, &c. The circles a little elevated, and the margin very blunt.

When the plant is full grown, the tubes are near half an inch in length, of a reddiſh brown colour, and an hard, dry, woody ſubſtance, as is the whole plant; it is perennial, growing and increaſing from year to year.

This ſpecimen grew on the ſtock of a cherry tree, in *Southowram*, near *Halifax*.

BOLETUS *acaulis faſciis diſcoloribus poris albis, Sp. Pl.* 1645. *Hudſon Angl.* 626. *Schæf. Fung. T.* 136. *Poliporus ſeſſilis ceſpitoſus planus hirſutus anulis verſicoloribus. Hall. Hiſt.* 2282. *Fungus meſintericus. Sterb. T.* 27. K. *Fungus lignoſus roſeus variegatus. Boccone, P.* 295. *T.* 8. *No.* 5. *Agaricus ſquamis iridiformibus. Battarra, T.* 35. A. XCV. *verſicolar.*

STRIPED BOLETUS.

TAB. LXXXI.

THIS plant, like the laſt, when young, adheres by its whole breadth to decayed wood or bark, having the hairy ſide downwards and the pores upwards. I have ſpecimens which grew in a moiſt ſituation, upon wet wood, which grew to their full ſize in this manner; they are two or three inches diameter, about half an inch thick, and of a milk white colour in every part; they have not the leaſt appearance of hairineſs or dawnineſs on either ſide. In another ſpecimen, the plant has formed itſelf into a firm ſolid lump, ſuited in ſhape to the cavity of an old beam, wherein I found it growing, and is nearly the ſize of a man's fiſt.

The moſt common manner of its growing, is like the *Boletus auriformis* and *Agaricus quercinus*; to ſeparate from the wood except on one ſide, to become horizontal, and to grow and increaſe in that direction:—what is now become the upper ſide is covered with a cloſe, ſhort, velvety dawn, of various colours; amongſt which, a purpliſh kind of lead colour generally prevails, or forms the ground-work; upon this are concentric ſtripes, of various browns, gold colour, green, or purple; the whole in decay changes to a dirty green, or greeniſh brown.

The pores are cream-coloured or white, ſometimes round and very ſmall, at other times angular and more large. The tubes very ſhort.

Grows in woods about *Halifax*, plentifully.

XCVI. *auriformis.* BOLETUS *acaulis imbricatus tenuis coriaceis, ſuperne villoſus, inferne planus. Helvella acaulis. Hudſon,* 633. *Helvella villoſa. Relhan,* 463. *Auricula reflexa. Bulliard, Pl* 274. *Agaricus villoſus tenuis, inferno lævis. Ray Syn. P.* 21. *No.* 4.

EARLIKE BOLETUS.

TAB. LXXXII.

THIS plant at firſt grows flat, adhering by its whole breadth to the bark of the dead branches or ſtocks of trees; it is moſt frequently of a circular figure, the upper ſide quite ſmooth, and of a browniſh yellow, afterwards the under ſide, which is very hairy, begins to riſe, and ſeparate itſelf from the bark; ſometimes the whole margin riſes, and the plant reſts on a central baſe, *as at c.*—but more frequently it is raiſed on one ſide only, the adhering part ſeving as a baſe or root to the part which is ſeparated, and which turns to an horizontal direction, grows, increaſes, ſends out other ſpecimens from its extremities, in a double or imbricated order, and continues from year to year, *as at e.*—the upper ſide (which, by the bye, was the under in the infancy of the plant) ſtill continues covered with a ſhort ſtiff coat or ſhag, which while the plant is young is generally of a yellowiſh buff, and is marked with concentric lines of other colours; but when old changes to an hoary grey, the circles a little darker: the under ſide changes to a dark cheſtnut brown. A ſmall particle, *as at a.* is magnified at *b.* the ſhag conſiſts of filaments, divided, ſubdivided, and very much entangled: I ſought for ſeeds, but could diſcover none.

I have placed this plant amongſt the *Boleti,* becauſe it coincides in ſubſtance, manner of growth, and in the whole habit, with the firſt diviſion of that genus.

A certain characteriſtic of an *Helvella* is this, that when of proper age, on being gently irritated, it will eject a fine powder, in form of ſmoke; a property which is wanting in this plant.——It poſſibly may, though very rarely, produce ſeeds like its congeners:—we ſee plants of the ſame claſs which grow in great plenty, and yet their fructifications are very rarely diſcovered, as the *Lichen phyſodes, furfuraceus,* &c.

BOLETUS *petiolatus lateralis, pileo coriaceo pallide-luteo, margine acuto, poris tenuiſſimis. Agaricus ſquamoſus glaber. Battarra, P.* 68. *T.* 34. A. XCVII. *lateralis.*

LATERAL BOLETUS.

TAB. LXXXIII.

THE root in this Boletus is black, hard, and of a woody ſubſtance. The ſtem gradually increaſes upwards, till it laterally ſpreads out into a pileus, of a circular figure, only deficient on the ſide where the ſtem loſes itſelf in its ſubſtance; and in well grown ſpecimens, the two oppoſite margins on the defective ſide increaſe, ſo as to touch each other.

The pileus from one to two inches diameter, flat, and quite ſmooth on the ſurface; the margin gently waved in ſome ſpecimens, in others plain, in both very thin and acute; the colour on the upper ſide is exactly like the leaves of trembling poplar, when they turn yellow, and fall; the ſubſtance much reſembles tanned neat's leather.

The pores are round, and very minute, ſo as not to be diſcerned by the naked eye in the largeſt ſpecimens. The tubes are about a line in length; when magnified a little, I found them to be cylindrical, and their diſpoſition very regular and beautiful. The colour of the pores is a little paler than that of the pileus.

Specimens of this, I gathered on the ſtump of a fallen willow tree, below *Woodhouſe*, near the river *Calder*, in Auguſt, 1787. I have ſeen old ſpecimens elſewhere, of a dark duſky brown colour, and of a ſubſtance as hard and firm almoſt as oaken wood.

Such as are ſupported on a central ſtem.

XCVIII. *luteus.* BOLETUS *ſtipitatus, pileo pulvinato ſubviſcido, poris rotundalis convexis flaviſſimis, ſtipite albido. Sp. Pl.* 1647. *Hudſon Angl.* 627. *Schæf. Fung. T.* 103. *Ceriomyces pileo fornicato. Battarra, T.* 29. *Fig.* C. *Boletus luteus. Dillen. C. Giſs. T.* 10. *No.* 1. *Fungus poroſus autumnalis viſcidus. Buxbaum, Cent.* 5. *T.* 14. *Fungus ranarum. Sterb. T.* 17. I. M. *Hedwig Crypt. T.* 36. *Fig.* 210.

YELLOW BOLETUS.

TAB. LXXXIV.

THE root conſiſts of a tuft of dawny fibres, iſſuing from the baſe of the ſtem, by means whereof the plant adheres firmly to the ground.

The ſtem is ſolid, ſpongy, generally largeſt near the root, and three or four inches high; the colour is variable, in ſome ſpecimens of a pale, in others of a deep yellow; ſometimes olive-coloured, or duſky; in full grown plants frequently ſtrongly tinged with a fine bright crimſon or blood colour, on the upper part, which is loſt on the lower, where it becomes duſky or brown, olive, ſtraw colour, or green.

The curtain is of an extremely tender and delicate texture, and vaniſhes almoſt as ſoon as the rim of the pileus ſeparates from the ſtem; ſometimes, however, I have ſeen it in plants of an advanced growth, as is expreſſed in the plate. The tubes are cylindrical, longeſt in the middle, where they adhere to the ſtem by their ſides. The pores are round, and of a bright yellow, turning to a dirty green in decay.

The pileus is cuſhion-ſhaped, at firſt glutinous and yellow, changing in its progreſs to olive, duſky brown, and various other hues; the fleſh is of a pale yellow, thick, brittle, and ſpongy.

Grows in woods about the roots of trees, in July and Auguſt; it is the moſt early of the autumnal *Fungi*.

BOLETUS *ſtipitatus, pileo glabro pulvinato marginato, poris compoſitis acutis porulis angulatis brevioribus. Sp. Pl.* 1646. *Hudſon Angl.* 627. *Scop. Corn.* 1586. *Schæf. T.* 103. *Hall. Hiſt.* 2302. *Mich. Gen. P.* 127. *T.* 68. *F.* 1. *Ceriomyces craſſus. Battarra Fung.* 62. *T.* 29. *Fig.* A. B. *Fungus poroſus craſſus. Ray Syn. P.* 11. *No.* 2. *Caput Buſonis. Sterb. P.* 181. *T.* 17. *Fig.* G. G. XCIX. *bovinus.*

BROWN BOLETUS.

TAB. LXXXV.

THE root conſiſts of a tuft of black fibres, iſſuing from the baſe of the ſtem.

The ſtem is at firſt globular, hard, and ſolid; as it advances in growth it becomes oblong, and in ſome ſpecimens nearly cylindrical, and about three inches high: it is often beautifully reticulated with capillary veins, of a dark red colour, eſpecially towards the root; the colour is generally a red brown. I never could diſcover any curtain upon this plant.

The tubes are round, the thickneſs of an hog's briſtle, very cloſely arranged; they are of a pale yellowiſh colour. The pores are round, much ſmaller than in the laſt ſpecies, and of a ſtrong fulvous brown colour. In this ſpecies the tubes, *at* B. are longeſt in the middle, between the rim of the pileus and the ſtem, growing ſhorter both outward and inward, and do not, as in the Yellow Boletus, adhere to the ſtem, or even touch it.

The pileus is convex, the margin acute, the colour varies from dark brown to fulvous, fawn colour, or buff of various hues; the internal ſubſtance is a greeniſh white, but on being cut, or broken, inſtantly changes to a dark blue colour.

This is a more rare plant in this neighbourhood, and does not appear till September. I am ſorry to find in a late Engliſh Author, that ſome of the characters which belong to this plant, are miſtakenly applied to the Yellow Boletus.

c. *procerus.* BOLETUS *ſtipitatus, pileo parvo convexo glabro, poris tenuiſſimis numeroſis albidis, ſtipite longo medio craſſo.*

TALL BOLETUS.

TAB. LXXXVI.

THE root conſiſts of numerous fibres, iſſuing from the baſe of the ſtem. The ſtem is obtuſely pointed at the baſe, from whence the lower part greatly increaſes in thickneſs, for the ſpace of an inch or two, and then gradually decreaſes again to the top. The colour is a pale duſky olive; the ſubſtance hard and brittle; the height five or ſix inches.

The pileus is at firſt globular, afterwards becomes ſemioval, or highly convex; the ſurface is ſmooth, dry, and to the touch feels like fine cloth; it is of a pale duſky olive colour; the fleſh white and brittle. The tubes are cylindrical, very fine and white; the pores white, and ſo minute as not to be diſcerned by the naked eye. In decay the whole turns to a dirty brown, and diſſolves in a turbid gelly.

This is a rare ſpecies; the ſpecimens here figured, I gathered in *Woodhouſe-Wood*, and I have ſeen the plant in ſeveral other places about *Halifax*.

I find no deſcription or figure which agrees exactly with this plant. Is it a naked variety of the *Fungus cinaræ formæ*, Artichoke muſhroom, of PARKINSON, *P.* 1324. *No.* 25. which he ſays grows at *Ripton*, near *Aſhford*, on *Bromley-Green*, &c. and which is well figured by my ingenious friend DICKSON, in his *Pl. Crypt. Fas.* 1. *T.* 2. *F.* 2?—I have ſometimes obſerved a faint reſemblance of ſcalineſs on the ſtem of my plant, but the pileus is conſtantly ſmooth from firſt to laſt.

BOLETUS *ſtipitatus, pileo flavo ſubtomentoſo, poris ſubangulatis deformibus fulvis planis, ſtipite flavo. Sp. Pl.* 1647. *Poliporus carne ſecedente petiolatus, pileo villoſo cervino poris albidis. Hall. Hiſt.* 2311. *Fungus poroſus tenuis coriaceus. Buxbaum Cent.* 5. *T.* 15. *Fig.* 1. CI. *ſubtomentoſus.*

WOOLLY BOLETUS.

TAB. LXXXVII.

THIS pretty Boletus has an hard compreſſed root, emitting numerous black fibres.

The ſtem is of a reddiſh brown, an inch or an inch and a half high, often compreſſed or ſulcated, and of a tough, hard, dry, leathery ſubſtance.

The pores are ſmall and angulated, but not of equal figure; their margins are jagged or laſciniated, and of equal height, which gives an appearance of woollineſs to the underſide of the pileus: the colour is a bright fulvous brown. The tubes, *at* B. are about a line and half in length, and conſtitute almoſt the whole thickneſs of the pileus; they are tough, and firmly united together by their whole length. They are repreſented at A. as they appeared when a little magnified.

The pileus or coat, to which the tubes are affixed, is very thin, *as at* B. of a tough, hard, vellumy ſubſtance; of a fulvous brown on the upper ſide, and appears to the eye as if covered with ſhort ſilky filaments cloſely combed down, from the centre to the margin; but which, in fact, are rather fine almoſt imperceptible *ſtria*, inſeparable from the ſurface: the margin is ciliated with brown hairs, and the ſurface marked with four or five concentric ſtripes of a darker colour.

It is a rare plant here. The ſpecimens from which this deſcription and theſe figures are taken, grew in *Robin Hood*'s *Scar*, in *Southowram*, near *Halifax*, in September, 1784.

AN

HISTORY OF FUNGUSSES,

GROWING about HALIFAX.

GENUS III.

HYDNUM.

CII. *imbricatum.*

HYDNUM *ſtipitatum, pileo convexo imbricato. Sp. Pl.* 1647. *Hudſon Angl.* 628. *Flora Danica, T.* 176. *Erinaceus eſculentus albus craſſus. Mich. Gen. P.* 132. *T.* 72. *Fig.* 2. *Echinus petiolatus albicans ſuperne ſquamoſus. Hall. Hiſt.* 2324.

IMBRICATED HYDNUM.

TAB. LXXXVIII.

THE root conſiſts of a few fibres, iſſuing from the club-ſhaped baſe of the ſtem.

The ſtem is white, ſolid, groſs, brittle, of a ſpongy ſubſtance, and three inches high;—in full grown plants the thickneſs of one's thumb, and ſometimes a number of ſtems adhere together by their fibrous baſes.

The under ſide of the pileus is thickly ſet with ſoft prickles, pointing downwards; theſe are white, and of various lengths, from one to three or four lines; they are of a tender, ſoft ſubſtance.

The pileus is at firſt ſmooth and globular, afterwards becomes convex, ſometimes lobed, and gaſhed on the margin, the ſides of the lobes lying over each other; but more frequently only waved or undulated at the margin. I have not found the ſurface to be much ſcaled or imbricated, though I have been long acquainted with the plant. The pileus thick and fleſhy; and the whole plant is white, and of a brittle, ſpongy ſubſtance. The figures in *Vaill. Paris, T.* 14. *Fig.* 6, 7, 8. ſeem to have been taken from this plant.

Grows in a deep narrow lane, by which you aſcend the wood at *North-Dean*, near *Halifax*, in September and October.

HYDNUM *ſtipitatum, pileo convexo lævi flexuoſo. Sp. Pl.* 1647. *Hudſon Angl.* 628. *Echinus petiolatus ſubrufus, petiolo levi, Hall. Hiſt.* 2325. *Erinaceus coloris pallide citrei. Dillen. C. Giſs. P.* 188. *T.* 1. *Erinaceus eſculentus albus craſſus. Mich. Gen. P.* 132. *T.* 72. *Fig.* 3. *Hedwig Cript. T.* 37. *Fig.* 212, &c. CIII. *repandum.*

FLAT HYDNUM.

TAB. LXXXIX.

THE root is fibrous; the ſtem ſolid, brittle, crooked or bowed, nearly of equal thickneſs, of a pale cinnamon colour, four or five inches high, and often inſerted into the pileus, towards one ſide, or not juſtly in the centre. The ſtems frequently riſe in cluſters of four or five, adhering by the baſes, and ſuſtaining plants of various ſizes, which preſs upon each other, and thereby become much diſtorted.

The ſoft ſpines or prickles underneath, are almoſt always placed obliquely, ſo as to lay over one another in an imbricated order; ſometimes they are ſimple, ſometimes divided; conſtantly of a bright cinnamon colour, and a ſoft brittle ſubſtance.

The pileus is flat and ſmooth, feels to the touch like vellum; the rim rudely lobed, ſinuated or laſciniated, and conſtantly of a pleaſant bright cinnamon colour; the fleſhy or internal part, is white and brittle.

This plant grew in great abundance in *Lee-Bank-Shroggs*, in September, 1786; where I gathered the ſpecimens here figured and deſcribed.

In one ſpecimen, I obſerved a dawny matter adhering to the ſtem and ſpines; which looked like the fragments of a curtain, but I could not be certain that it was ſuch.

CIV. *auriſcalpum.* HYDNUM *ſtipitatum pileo dimidiato. Sp. Pl.* 1648. *Hudſon Angl.* 629. *Echinus petiolo gracili laterali, pileolo plano obſcuro. Hall. Hiſt.* 2321. *Roſs Elem. T.* 3. *Fig.* 2. *b. Buxbaum Cent.* 1. *T.* 57. *Fig.* 1. *Mich. Gen. P.* 132. *T.* 78. *Fig.* 8. *Schæf. Fung. T.* 143. *Boletus pileo orbiculari, &c. Gleditſch, P.* 74. *No.* 7.

EARPICK HYDNUM.

TAB. XC.

THE ſtem is bulbous or ſwollen at the baſe, where it adheres to the decaying cones of fir, without any viſible radical fibres; from the baſe the ſtem gradually diminiſhes in thickneſs, ſometimes it is divided into two or three branches or diviſions, each whereof ſuſtains its own proper pileus; it is covered, from the baſe almoſt to the top of the ſtem, with upright, ſtiff, brown hairs, is of a dark fuſcous brown colour, and a tough dry elaſtic ſubſtance; the height in a full grown plant about two inches.

The pileus is ſometimes circular, but more frequently oblong, ſemicircular, or kidney-ſhaped. The ſtem often placed out of the centre, ſometimes at one ſide; it is flat or convex, the centre ſometimes elevated, ſometimes depreſſed, always of a dark brown colour, and a dry tough ſubſtance; the under ſide a little paler; the ſpines are dry, tough, hard, unequal in length, and of a brown colour.

Grows under fir trees, in plantations about *Halifax*, in Auguſt and September.

In a natural arrangement, will not the *Hydni* and *Boleti* touch each other, between this plant and the *Boletus tomentoſus*?

AN

HISTORY OF FUNGUSSES,

GROWING about HALIFAX.

GENUS IV.

PHALLUS.

PHALLUS *pileo ovato celluloſo, ſtipite nudo rugoſo. Sp. Pl.* 1648. *Hudſon Angl,* 629. *Boletus capite tereti reticulato. Hall. Hiſt.* 2247. *Mich. Gen.* 203. *T.* 85. *Fig.* 1. 2. *Tourn Inſt. P.* 561. *T.* 329. *Fig.* A. *Battarra. P.* 24. *T.* 2. *Fig.* F. *Sterb. Fung. P.* 92. *T.* 10 *Fig. omn. Fungus favigonoſus. Ray Syn.* 11. *No.* 7. *Park. Theat. Ger. Emp.* 1583. CV. *eſculent.*

ESCULENT PHALLUS or MORELL.

TAB. XCI.

THE ſtem is hollow and wrinkled, contracted or purſed at the baſe, where it emits a few radical fibres; it is two or three inches high, of a ſmooth but unequal ſurface, being frequently diſtorted, and having many deep furrows and alternate ridges. The ſubſtance of the ſtem is extended all over the inſide of the pileus, and makes the lining or inward ſurface of the whole cavity:—here it is white, wrinkled, and duſted over with a ſoft mealy powder.

The pileus is generally of an oval figure, ſometimes globular or compreſſed, and varies greatly in ſize and colour, according to ſoil and ſituation; it is moſt commonly of a pale yellowiſh brown or buff, changing to a dark duſky colour in decay. The ſurface is cellular, wrinkled, and latticed; the cells exhibiting a great variety of unequal figures.

Grows in ſandy meadows, about the river *Calder*, but rarely. It is greatly eſteemed as an eſculent.

CVI. *impudicus.* PHALLUS *volvatus ſtipitatus, pileo albo celluloſo, apice pervio. Hudſon Angl.* 629. *Phallus volvatus ſtipitatus pileo celluloſo. Sp. Pl.* 1648. *Sterb. Fung. T.* 30. *Fig.* A, D, B, C. *Mich. Gen. T.* 83. *Hall. Hiſt.* 2248.

STINKING MORELL.

TAB. XCII.

THE root conſiſts of one pricipal fibre, the ſize of a packthread, and about a ſpan long; it is ſoft, flexible, white, and emits a few other capillary fibres from its ſides.

When the plant firſt appears above ground, it is of the colour, ſhape, and ſize of an hen's egg, *as at a.* ſoon after, the outer ſkin or ſoft ſhell breaks at the ſummit, and begins gradually to ſlide down and diſcover a thick coat, of ſtiff, glewy, pale coloured, tranſparent jelly, *b.* in the ſpace of an hour this jelly ſlides down to the root, in great wrinkles, and diſcovers another volva, *c.* which is divided, about half way down, into three thick white, obtuſe lobes, which gradually give way to a conical pileus, that makes its appearance in the ſpace of an hour.

The pileus, *d.* is at firſt thickly covered with a ſhining ſubſtance, of a blackiſh green colour, which rubbed between the fingers, looks like a moiſt ſoft powder, and which ſoon begins to melt, and fall off, in a thick, black, turbid, intolerably fœtid gelly; by this time the ſtem, *g.* has acquired its proper height, four or five inches; it is hollow and ſmooth within, its ſubſtance cellular, light, and ſpongy. The pileus alſo, after the diſcharge of the gelly, becomes cellular and white; but theſe cells are much larger than thoſe in the ſtem; the inſide is ſmooth, and lightly adheres to the ſtem, at its apex: at laſt the ſtem becomes looſe in its own proper ſocket, *b.* falls and becomes the food of inſects.

In the cavity of the ſtem, adhering to the top, and appearing as if encloſed in a membrane, hangs a piece of pellucid gelly, of a ſtiff, but rather trembling ſubſtance, *as at i.*

I watched the progreſs of this plant on the 20th of September, 1776, when this deſcription was written.

Grows in woods and hedges about *Halifax,* but rarely.

INDEX,

OF THE

TRIVIAL NAMES after the AGARICS, in this Volume.

END OF VOL. II.

ERRATA.

INTRODUCTION. Page 24. line 34. *rent.*——27. 11. a *comma* after *perishing.*——29. 13. for 56. 5, 6.——30. 4. after *strong* erase *comma.*——32. 2. after *pale* erase *comma.*——IN THE BOOK. P. 55. in margin, *adscendens.*——63. 13. *rent.*——68. 1. *flavo.*——84. 2. *rotundatis.*——IN VOL. I. INTRODUCTION. P. 16. l. 10 read *synonyma of present Authors.*

The plants of the order of *Fungi*, afford food to many ſpecies of inſects; the gills of *Agarics*, and the tubes of the ſtalked *Boletuſſes*, are greedily devoured by ſnails; while the ſolid or fleſhy parts afford both food and habitation to the *Larvæ* of numerous ſpecies of flies, both of the *Diptera* and *Coleoptera* claſſes. Some of theſe *Larvæ*, when ſufficiently fed in the fleſhy parts of the plant, make their way down the hollow of the ſtem into the ground, where they ſwathe themſelves, and remain in the *Pupa* ſtate, till the appointed time of their revival.

Throughout this work, I have endeavoured to clear the ſubject from thoſe difficulties wherewith it has been long encumbered. In ſome ſpecies, indeed, it was very difficult to determine with preciſſion; the plants are ſo very ſimilar in figure; ſo very different in appearance, at different ſtages of their growth; ſo various in their colour, according to the weather or their age; and ſo confounded by authors, that a man might almoſt ſpend his whole life amongſt them, in order, clearly and accurately, to aſcertain their ſpecies. I have carefully obſerved, drawn, and deſcribed the plants of this order, when in ſeaſon, for twenty-ſeven years paſt; having drawings in my poſſeſſion which I made in 1761. I have made uſe of all the lights I could obtain from the works of *Linnæus*, *Hudſon*, *Scopoli*, *Haller*, *Vaillant*, *Micheli*, *Battarra*, *Sterbeeck*, *Gleditſch*, *Dillenius*, *Ray*, &c. &c. and after all, I willingly ſubmit my obſervations to the few, who have ſtudied the ſubject as devoutly as myſelf, to alter, change, or totally *reject*, ſuch as are wrong; and I hope that thoſe few, knowing the difficulties that attend the undertaking, will candidly overlook and forgive ſuch ſmall miſtakes as have eſcaped me.

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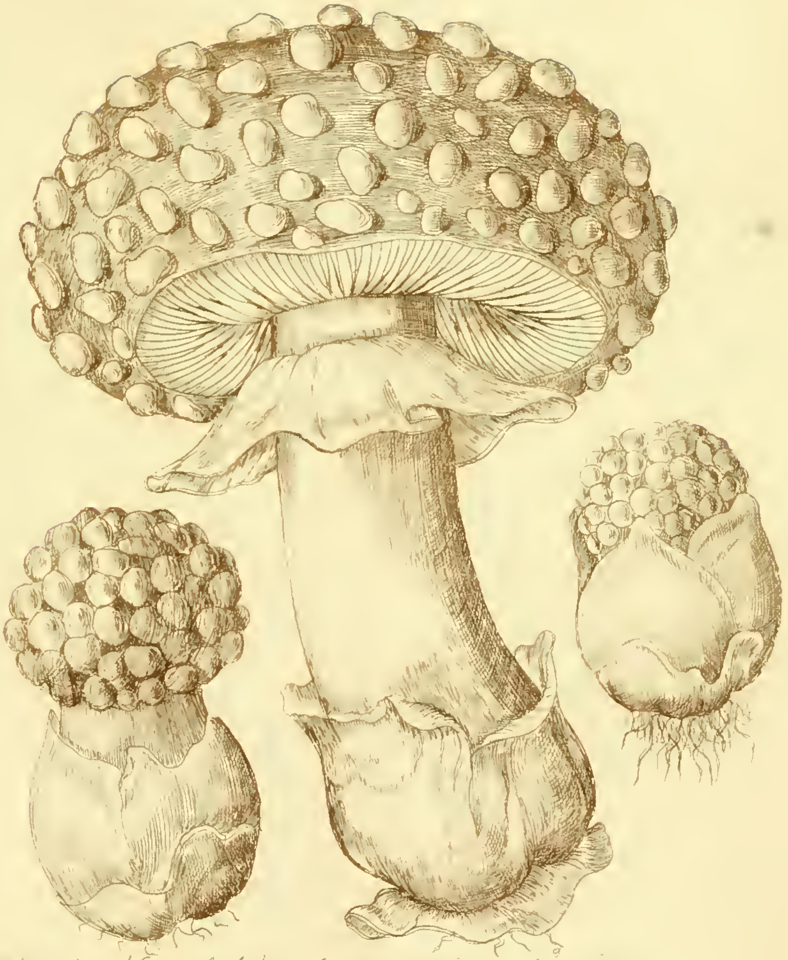

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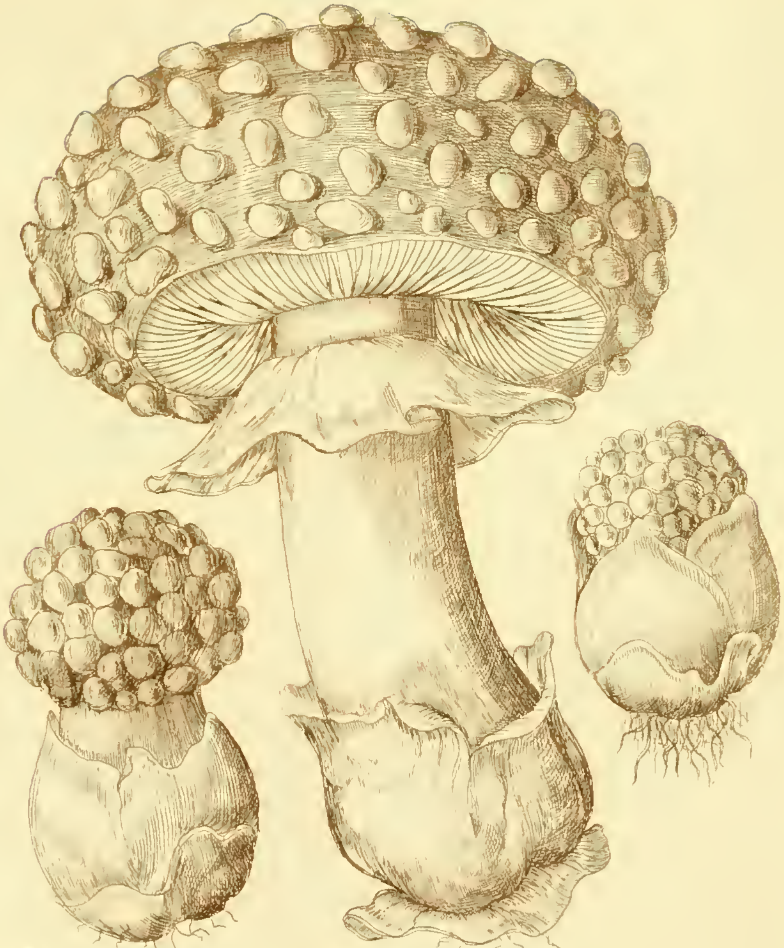

...tered from Nature by J. Bolton at Stannary near Halifax. March 1.22. A. 1788.

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James Bolton fecit, at Stannary near Halifax April 9th 1788.


J.D. 1788

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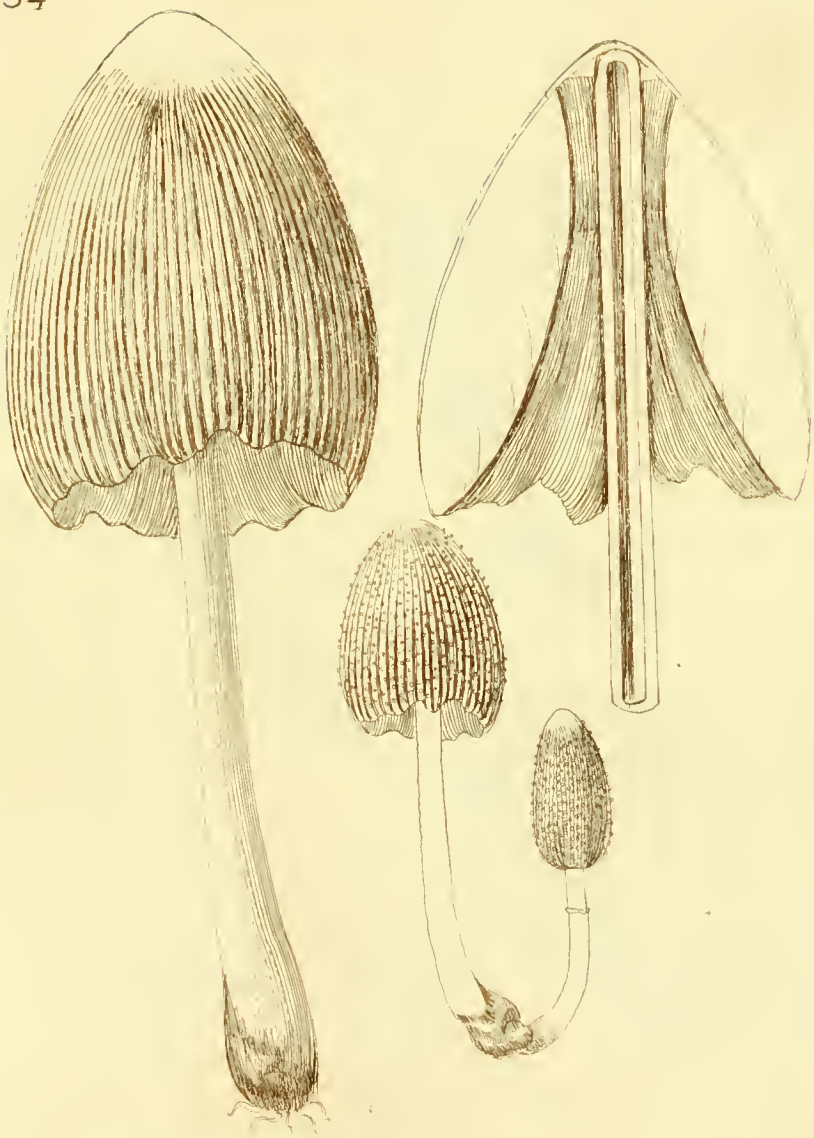

J. B.

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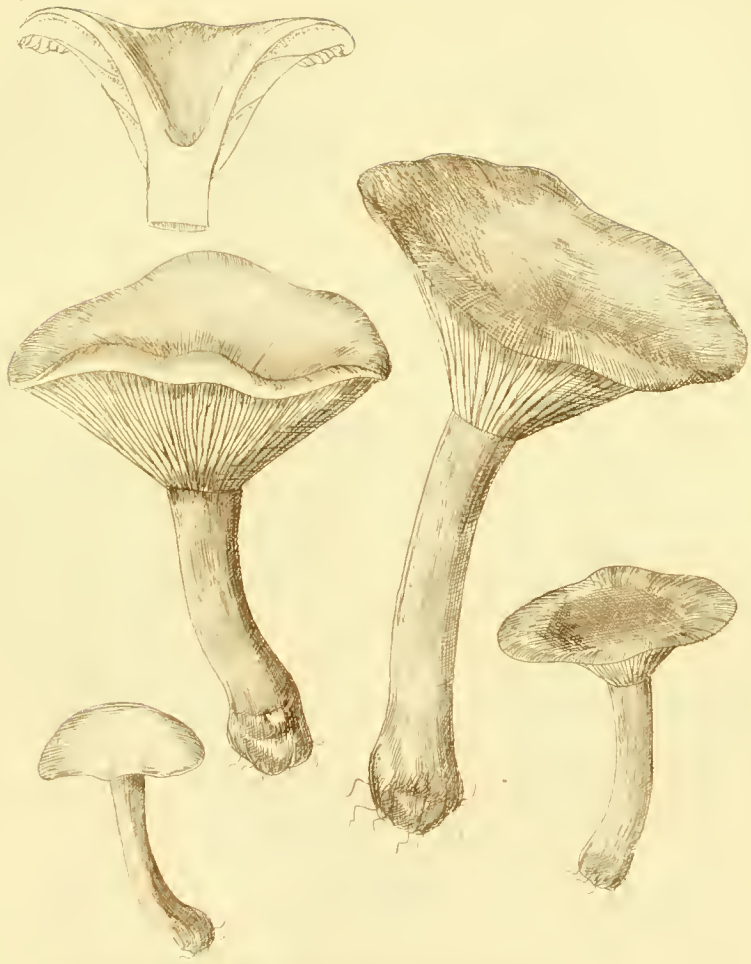

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J. Bolton del.et sculp. Sept.r 23d 1788.


62


A

3.

Fig 1

Fig 2


Fig. 1
Fig. 2
d B

Nature Hr Domin

J. Bolton Del. et Sculp. 1785.


Fig. 1
Fig. 2


a
b

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... Bolton del. et Sculp.t at Stannary. March 2.d D 1788.


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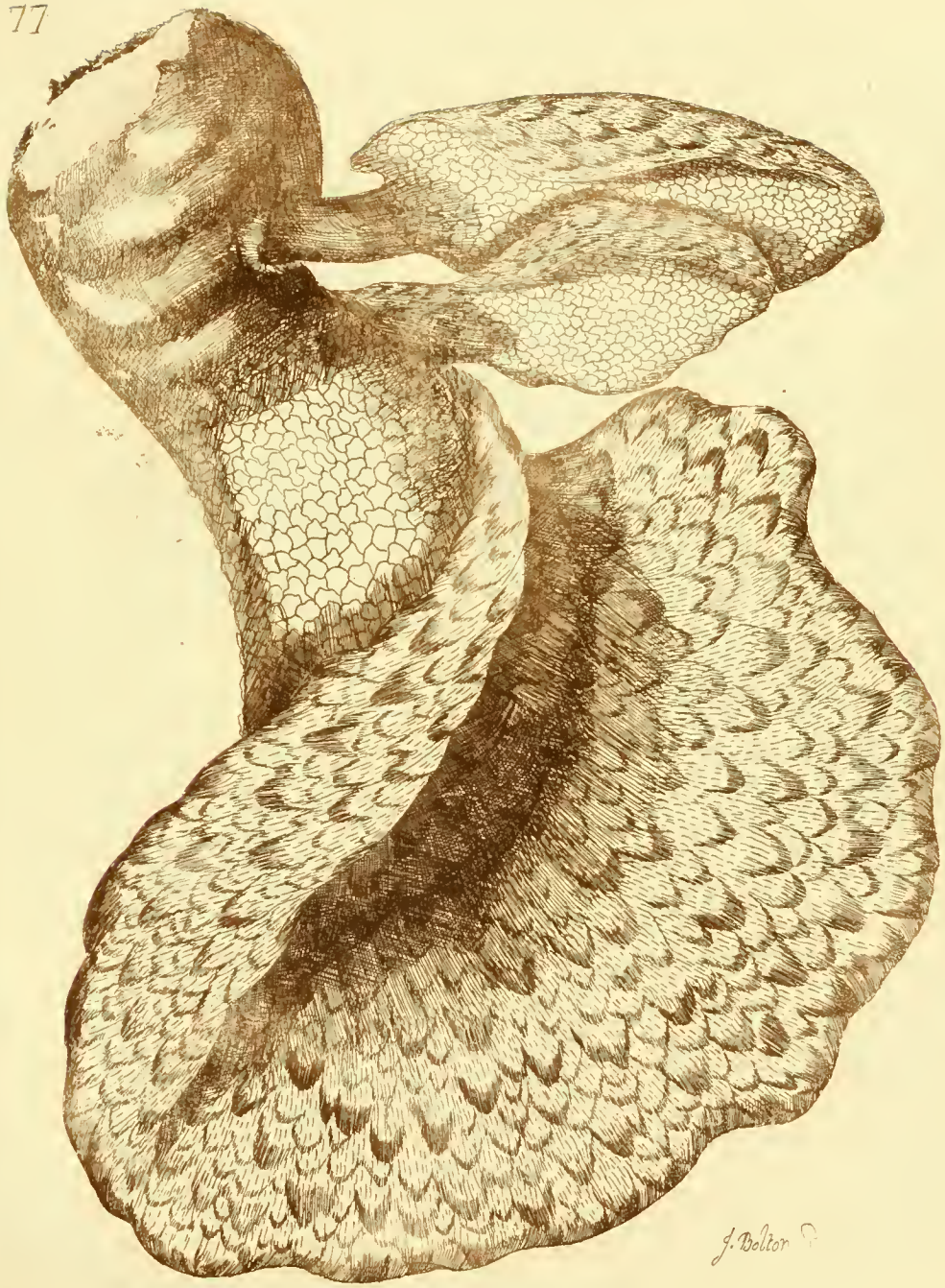
J Bolton fecit.
at Halifax 178


J. Bolton

Drawn & etchd from Nature by J. Bolton a[illegible]

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Boletus hepaticus drawn & etched from Nature

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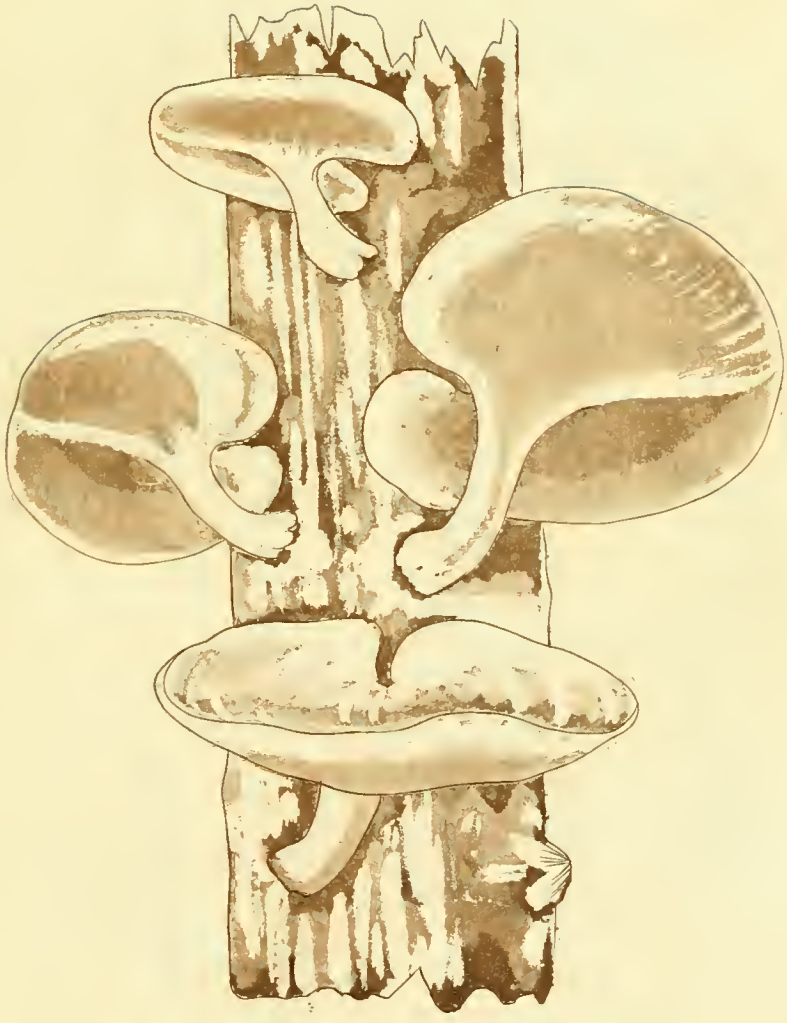


A


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James Bolton


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b

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[illegible] by J. Bolton at Stannary near Halifax [illegible]

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J. Bolton

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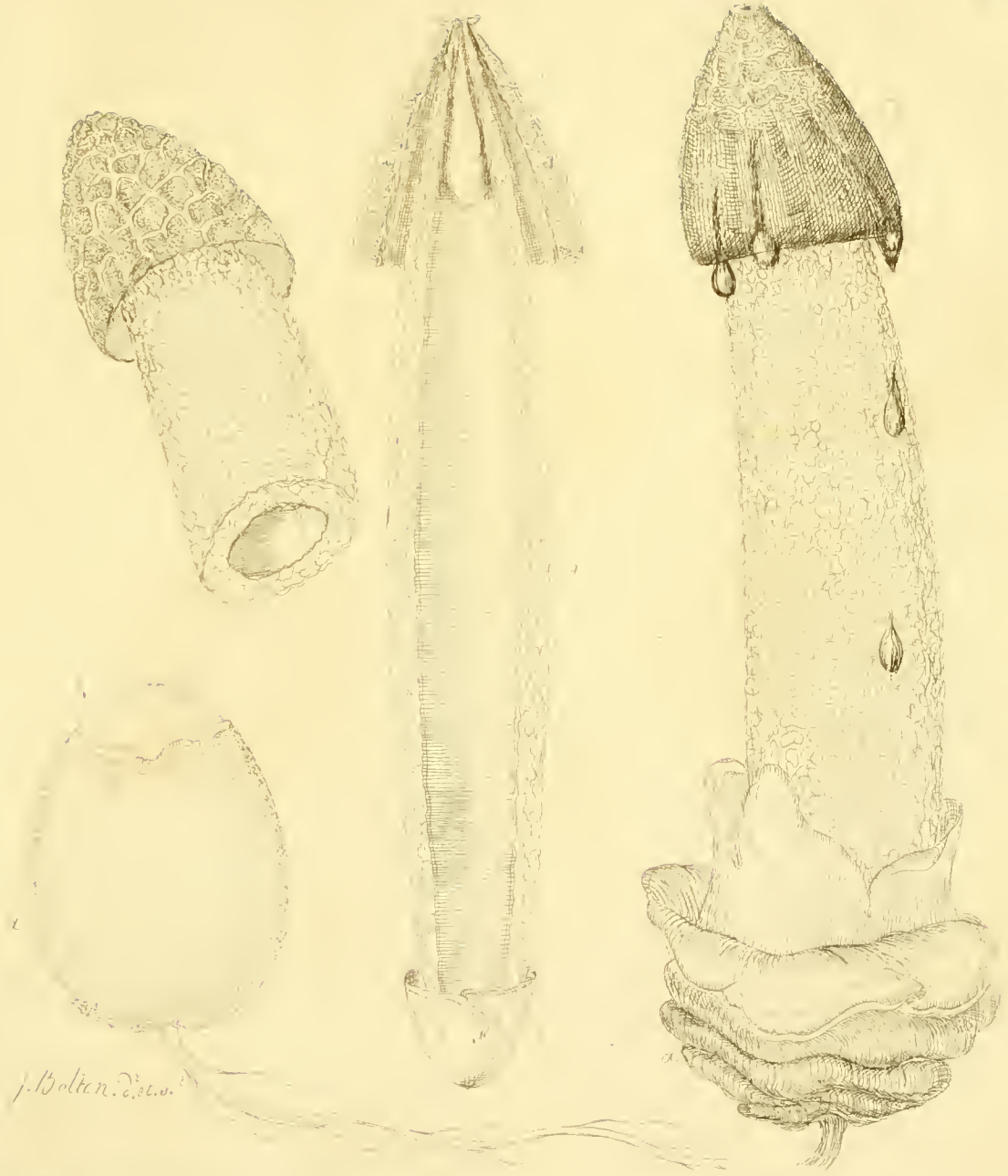
J. Bolton del. et sc.