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Descriptions of several new species of CYNIPS. and a new species of
DIASTROPHUS.

BY H. F. BASSETT.

QUERCUS RUBRA. *A cluster of forty or fifty elongate-ovate galls on a branch of a young red oak tree. They are from three-fourths of an inch to an inch in length, and a half an inch in diameter in the middle, tapering to a point at the ends; covered with a short, velvety pubescence, and when dry, ridged like a melon; the inside, a cork-like substance adhering closely to the larval cell, and divided lengthwise into many parts like the dissepiments of the seed-vessels of various kinds of plants; monothalamous—the cell one-tenth of an inch long.*

C. q. formosa n. sp.

♀. Head black. Head and face finely and evenly rugose. *Antennæ* 15-jointed, yellowish-red, the terminal joints darker. The suture between the 14th and 15th as distinct as the preceding ones; face with a short pubescence, the hairs converging towards the mouth; mandibles black, palpi yellowish-red. *Thorax* black; a few short hairs on the collare; *mesothorax*: parapsidal grooves distinctly marked, median line broad where it begins on the scutellum, but gradually decreases and disappears just before reaching the collare; between this and the parapsidal grooves two short lines beginning on the collar and extending half way to the scutellum. The thorax and pleuræ are beautifully ripple-marked with fine short transverse lines. This style of marking is distinct from that of any of the species in my collection—thirty or more. The same style, only coarser, is seen in some Chalcidians. *Scutellum* small, finely rugose, the small foveæ are smooth and shining. Legs bright brownish-red, except the upper part of the femur, which is nearly black, and the black coxæ. *Abdomen* bright reddish-brown, with an extremely minute microscopic punctation; sheath of the ovipositor a dark brownish-red. *Wings* hyaline, also the veins, except the first and second transverse and the subcostal, which are a very pale yellow; areolet large, equiangular, bounded on the inner side by entirely colorless veins, radial area open. Length .12. ♂ unknown.

The flies have not yet left the gall (Nov. 25) though they have been in the imago state for several weeks, and crawled about actively when the galls were opened. They may be imprisoned by the hard dry gall, but I am inclined to think, that, like some other species, they remain in the galls in the perfect state through the winter and come out early in the spring.

The galls of this species are very rare. I have found only two clusters, and one of these was much eaten by some Lepidopterous larva, and the larvæ of the true gall fly were destroyed. Only a part of the galls in the other cluster were developed as described above; the smallest were not larger than grains of barley, but contained larvæ, and have produced true gall flies. Their diminutive size was owing, apparently, to their being closely crowded.

This and the species next described, *C. q. ventricosa* n. sp., are readily distinguished from any other American species yet described, by the female, (male as yet unknown,) having *fifteen distinct antennal joints*. Dr. Fitch (N. Y. Rep. Vol. 2. No. 309) speaks of having, in his collection, a female gall fly with fifteen jointed antennæ, but he does not describe it, nor the gall from which it came.

Westwood (Syn. Gen. Br. Insects) does not characterize any genus of the family Cynipidæ as having more than the ♀ 14, and the ♂ 15 antennal joints—but the ♂ of my *C. q. singularis** (Proc. Ent. Soc. Phila. Vol. 2nd. p. 326) has 16-jointed antennæ, and *C. q. scitula*—a new species described in this paper—also has the same number. The females of both these species have only 13 joints, the terminal one long and connately divided in the middle.

C. q. formosa and the species next described are evidently closely related, for besides the 15-jointed antennæ of the ♀ there are other points of resemblance; and the remarkable difference in the colors of the two species, the ripple-marked thorax of *C. q. formosa*, and the widely different galls from different species of oak, are the most marked specific characters. The shape of the abdomen of both species is peculiar; different in form, and, I think, in structure, from any other species I am acquainted with, but I have not yet sufficiently studied the structure to describe it well, and have simply, in my description, noticed the vertical diameter as equalling or exceeding the length.

* Mr. Walsh assures me that my *C. q. singularis* is the same as *C. q. nubilipennis* Harris. He is undoubtedly correct, and my name stands, of course, as a Synonym. Dr. Harris' very brief descriptions were definite enough, perhaps, when the number of species was, as when he wrote, very small, but hardly complete enough for the genus to-day. The number of species described and properly belonging to, or provisionally placed in, the genus *Cynips*, exceeds fifty, and many more will probably be found.

QUERCUS ILICIFOLIA. Galls growing in clusters from three or four to a dozen together, on the limbs and occasionally on the trunks of young shrub oaks. They are cone-shaped, truncate at the base, the apex often prolonged in a slender, recurved point. They are from four to five-eighths of an inch long, and from one-fourth to three-eighths in diameter at the base. When green, often of a deep red color; when dry, brown or black; very hard, enclosing a nearly free larval cell like that of *C. q. globulus*, Fitch.

C. q. ventricosa n. sp.

♀. Head and thorax a bright cinnamon color, head finely punctate, face pubescent, dark brown around the mouth, tips of the mandibles black, palpi pale brown. *Antennæ* long, 15-jointed, third joint longest, others gradually decreasing in length to the 15th, which is as long as the two preceding ones, and shows plainly a connate suture. *Thorax* finely and evenly punctate; parapsidal grooves not deep; the line dividing the mesothorax lengthwise reaches from the collare to the scutellum; each side of this is a line reaching half way from the collare to the scutellum, and marked with an indentation at the posterior end; also a deep linear depression on each side over the base of the wings; pleura microscopically punctate; mesothorax bounded on the sides and where it joins the scutellum by a dark reddish-brown line. *Scutellum* very finely sculptured, a dark and narrow ridge dividing it half the length. Feet yellow, tips of the tarsi black. *Wings* hyaline; the subcostal, anal, first and second transverse veins large, dark reddish-brown; the first two rather paler towards the base; areolet distinct; radial area open, the vein forming its base considerably enlarged. *Abdomen* darker brown than the thorax; segments short, second longest; vertical diameter, i. e. the distance from the back of the abdomen to the ventral edge, equals or slightly exceeds the length; terminal segments show a fine punctation. Length .14. Male unknown.

My galls were collected in June. The flies were found to be fully developed in October. They were cut out, else they would probably have remained in the galls until spring.

QUERCUS ILICIFOLIA. Elongated, fusiform galls growing on the upper side of the leaves of *Q. ilicifolia*, and standing erect, or nearly so—sometimes entirely preventing the development of the leaf, and apparently growing out of the petiole. The central nucleus containing the larvæ is kept in place by radiating woody fibres as in *C. q. inanis* O. S. The largest galls are two inches in length and seven-eighths of an inch in diameter; average size about one and three-fourths inches long, and three-fourths in diameter. Apex rather longer and more slender than the basal portion, and often considerably curved.

These galls are of the same dark green as the leaves. Many are found very much smaller than those described above, but they produce parasitic flies. Baron Osten Sacken writes me that he met with numbers of these galls in Pennsylvania several years ago. They are rather rare here (Conn.)

Q. q. ilicifoliæ n. sp.

♀ Black, vertex of the head, and the entire thorax black, and deeply and irregularly sculptured; face rugose and pubescent; hairs converging toward the mouth; palpi shining reddish brown. *Antennæ* 13-jointed, the 13th long, and with a false suture apparent on the inner side; first and second joints very short, shining black; the remaining ones pubescent, and dull black. *Thorax* with a coarse pubescence. The parapsidal groove obliterated by the coarse, somewhat linearly arranged sculpturing. Foveæ large but sculptured like the rest of the scutellum. *Feet*: coxæ, and the upper part of the femur of the two anterior pairs black—other parts reddish-brown: posterior pair black, reddish at the joints. *Abdomen* black shining, the ventral edge clear brownish red. The segments, except the first and second, with a very fine microscopic punctation, most apparent on the third segment. *Wings* slightly dusky; veins brownish black, heavy; areolet very small, vein at the base of the open radial area covered by a large brownish black cloud, which covers part of the areolet but does not reach the anterior margin of the wing. A very light brown cloud in the basal cell of some specimens. Length .17.

♂.—*Antennæ* 15-jointed, feet darker than those of the female: posterior pair, including the tarsi, almost entirely black. Otherwise like the female except the usual sexual differences. Length .14.

Ten ♀ and four ♂ specimens.

QUERCUS ALBA. *Flat, green, succulent galls, often of a very irregular outline, and from one-fourth to more than an inch in diameter, the vertical diameter from one-fourth to three-eighths of an inch, growing on the leaves of the white oak, and producing, according to the size, from two or three, to more than a dozen gall-flies.*

The flies escape from the galls in June, through the upper or under surface. The water that enters the cavities the flies have left causes the galls soon to decay and drop off, but a few change to a dry pith-like substance, and remain on the tree through the summer. These might be taken for a different species, as they generally contain larvæ, but having reared a few *Spalangia* (?) from such galls, I infer they are all parasitic.

This species is closely related to *C. q. irregularis* O. S. but grows on a different species of oak, and Baron Osten Sacken to whom I sent

specimens, thinks it may be specifically distinct from that species, which I have not yet seen. The imperfect condition of his only specimen of *C. q. irregularis* renders a satisfactory comparison impossible, and acting upon his suggestion, I describe it as

***C. q. majalis* n. sp.**

♀ *Head* transverse, black, nearly smooth, but under a powerful magnifier presents a fine netted appearance; face smooth with a very few short white hairs; mouth brown, tips of the mandibles black. *Antennæ* long, with 13 joints, first and second short, third very long and enlarged at the upper end. These, except the slightly enlarged portion of the third, are a pale yellowish white, the remaining joints a light opaque brown. *Thorax* black, smooth and shining; without any grooves or striæ whatever on the mesothorax. *Scutellum* smooth, separated from the mesothorax by a broad shallow groove; foveæ wanting; marked posteriorly by *two deep transverse grooves*, causing three transverse ridges above the insertion of the abdominal peduncle. *Feet* white with a tinge of yellow, like the basal joints of the antennæ. *Abdomen* black, smooth; in dry specimens shrunken and wrinkled. *Wings* large with a faint duskiess and a dusky cloud resting on the first transverse vein; veins dull brown; areolet present; radial area open, long and very narrow. Length (dry) .09.

♂.—*Head* black; *antennæ* 15-jointed; three basal joints paler than of the ♀; others a semitranslucent brown. Third joint very long, remaining ones short, and of equal length. Third joint curved rather than incised. *Thorax*, the feet and the first and part of the second segment of the abdomen very light yellowish brown. The central part of the mesothorax dark shining brown; terminal segments of abdomen dark brown; in some specimens nearly black. Length .10, slightly longer than the ♀.

Several hundred ♂ ♂ and ♀ ♀.

QUERCUS TINCTORIA. *Woody, tuber-like galls, growing on the green branches of Q. tinctoria, sometimes simply an enlargement of the limb, at others entirely checking its growth and covered with leaves. They are from three-fourths to an inch and a half in length, and rather more than half an inch in diameter at the base, tapering to a cone-like point.*

***C. q. scitula*, n. sp.**

♀. Black. *Head*, vertex black, subrugose; sides of the head and the face in some specimens a very dark brown, with a shade of red, but most are a dull brownish black; face pubescent. *Antennæ* 13-jointed, the 13th long and in the middle connately divided; the basal joints yellowish-brown, the terminal dark brown, the transition gradual. *Thorax* finely and regularly punctate; parapsidal lines fine, and two parallel interparapsidal lines so faint as to be seen only in certain positions to the light, median line merely a longitudinal depression, a short deep groove over the base of the wings. *Scutellum* regularly and finely sculptured; basal pits obsolete. *Feet* shining yellowish-brown. Middle of the

femur and tibia darker than the joints, tarsal tips black. *Wings* hyaline, 1st transverse and radial veins dark brown, others pale but distinct; areolet of medium size and at the base of the open radial area. Length .09.

The ♂ closely resembles the ♀ in color and markings. The abdomen is very long, and the antennæ a rich amber color, with a few of the terminal joints of a light brown. In all the specimens I have examined (16) the *number of antennal joints is sixteen*. Length .08.

Numerous ♀ ♀ and 25 ♂ ♂.

Dr. Fitch has given a very correct figure and description of the gall of his *C. q. batatus*, which, it will be seen, closely resembles that of the above species. Indeed there is little or no apparent difference in the galls more than pertains to the different species of oak on which they grow, but the flies are very distinct. As Dr. Fitch describes the fly so very briefly that it may easily be confounded with *C. q. scitula*, I give a more full description below:

Quercus alba.

C. q. batatus Fitch. (N. Y. Reports, Vol. 2nd, No. 311.)

♀ Black, shining, entire head black, vertex smooth; face, covered with a fine thin pubescence; color of the palpi, clear vitreous brown. *Antennæ* 13-jointed, first three joints pale yellow, others a pale semi-translucent brown. *Thorax* black, shining, but under a powerful magnifier shows a net-work of fine lines; parapsidal grooves and striæ obsolete. *Scutellum* smooth, polished; a few scattered hairs on the posterior portion: basal pits wanting; separated from the mesothorax by a deep shining groove. *Abdomen* black and polished but in all my dry specimens contracted and wrinkled. *Feet*, coxæ clear yellowish brown, femur, in the middle dark brown or black, as is also the tibia of the posterior pair; remaining portions, except the tips of the tarsi which are black, are of the same color as the coxæ. *Wings* hyaline, all the veins dark brown and of nearly equal size. The cubitus large and heavy its whole length; areolet large; radial area open. Length .09.

♂.—The antennæ of the male is 14-jointed. Feet dull pale yellow. Abdomen petiolate by the elongation of the first segment. Length .08.

Numerous specimens ♂ and ♀.*

* I am satisfied that there are annually two generations of *C. q. batatus*. The first appears early in May, from galls of the preceding year's growth.—the last late in June, from green galls. I have often found perfect insects in the galls in winter, and have reared flies from them, apparently of the same species reared from the summer galls. Inquilinae in great numbers are produced from the winter galls and few true gall flies, while the reverse is true of the summer form. As many of the summer galls remain green after the flies have left them, and as the tree's annual growth is nearly or quite complete the first of July, it

QUERCUS ILICIFOLIA. *Club-shaped, woolly galls, growing on the ends of the small limbs. Apex blunt and generally turned to one side, covered in summer with a few leaves and containing one, and occasionally two or three larvæ. It is strikingly like that of C. q. tuber of Fitch, but produces a fly which though closely related, is evidently a different species.*

C. q. similis n. sp.

♀. Head and thorax a bright brownish red; vertex of the head finely sculptured; the rather prominent ocelli are black only at the apex, face pubescent; hairs short, converging towards the mouth. *Antennæ* 13-jointed, the 13th nearly as long as the two preceding ones and in some individuals there is an obscurely marked connate suture. *Thorax* coarsely punctate, sparsely hairy, a shade darker than the head, three faint longitudinal lines reach from the collare to the scutellum, and two other lines, one on each side and very close to the median line, start from the collare and extend half-way to the scutellum; obscure line over the base of the wings. *Scutellum* sculptured, basal pits small, deep and smooth. The central portion of the pleura—in many species smooth and polished—is in this covered with very fine longitudinal striæ. The legs of a uniform brownish red, except the tips of the tarsi which are black. *Wings*, a subopaque white, the subcostal, anal, 1st and 2nd transverse very pale yellow, others colorless and the vein which bounds the posterior side of the radial area in other species is, in this obsolete, as is, also, the cubitus and areolet. *Abdomen*, red, except the dorsal portion of the middle segments which is nearly black; terminal segments withdrawn into the others in dry specimens, and the sheath of the ovipositor turned abruptly upward but does not extend above the back of the abdomen as in the *Inquilinæ*. Length .12.

♂. Black head and thorax. *Antennæ* 15-jointed, 1st and 2nd joints nearly black, others red. *Legs*, posterior pairs dark reddish-brown, the posterior pair dark brown, nearly black—all lighter at the joints. *Abdomen* black and shining, 2nd segment long. It is much smaller than the female. Length .08.

16 ♀, 4 ♂ specimens.

C. q. tuber Fitch. (N. Y. Rep. Vol. 2nd, No. 309.)

♀.—Head black, sides, however, in a strong light have a tinge of red; face black, pubescent, hairs converging towards the mouth. *Antennæ* yellowish-brown, 13-jointed. *Thorax*, a reddish tinge on the shoulder of the collar; other parts black, rather densely pubescent. Three longitudinal lines somewhat obscured by the pubescence; two short lines extend half way from the collare to the scutellum and there is a short faint line over the base of the wings; scutellum rough, hairy; fovæ medium size; smooth spot on the pleura polished, shining, but not perfectly smooth. *Legs* brown, tips of the tarsi black. *Abdomen*

seems probable the June flies oviposit in the galls from which they were produced.—Jan. 28, 1865.

black shining, second segment longest, separated from the third by a connate suture, third with microscopic punctation. Sheath of the ovipositor not turned up nearly so much as in *C. q. similis*, to which species it is closely related. Wings hyaline, sub-costal, first and second transverse veins pale brown, others colorless; lower part of the cubitus obsolete; areolet present; radial area open. Length .12.

Nine specimens.

I have a single male gall fly reared from the same galls, but it differs so much from the female that I am inclined to think it belongs to a different species. The thorax is quite smooth and shining, with a few short, scattering hairs, and only two longitudinal lines that closely converge at the scutellum. The venation of the wings is like that of the female described above, and is unquestionably that of a true gall-fly. The antennæ light dusky brown, 15-jointed; legs dark shining brown, nearly black, paler at the joints.

Though the galls are very much alike, the venation of the wings, the pleuræ, and several other points of difference mark it as a distinct species from *C. q. similis*. Dr. Fitch has figured the gall of his *C. q. tuber* which he found "quite common particularly upon the soft and tender limbs of young (white oak) trees" (*N. Y. Rep.*, Vol. 2d, No. 309). He describes (l. c. No. 310) the galls of *C. q. arbos* as "swellings similar to that above described, growing on the tips of the limbs of aged and large white oak trees."

My galls, which are probably identical with his *C. q. tuber*, were gathered from low, shrubby white oak bushes, though I have often seen precisely similar ones on large trees. Dr. Fitch's descriptions of the flies from *C. q. tuber* or *C. q. arbos* will apply, so far as they go, to either the gall flies, or to the guest flies as the inquilinæ are termed by Mr. Walsh. For the reasons that follow, I am led to think that the species he described under the above names are both inquilinious species.

1st. My galls were gathered about the 20th of June, and were then green and soft like the wood of the young shoots on which they grew. The insects were then in the pupa state, and the imago came out early in July. The gall from which Dr. Fitch's *C. q. arbos* was reared was found in March, and were of the preceding year's growth, as were also those of *C. q. tuber*, if we may judge from his description of the color

of the gall, which will only apply to the galls long after the true gall-flies have left them.

2nd. My galls gathered from young white oaks, and which answer perfectly to his figure and description of *C. q. tuber*, produced females with 13-jointed antennæ, while his have but 12 antennal joints.

3rd. I have gathered several hundreds of these galls in the autumn, winter and early spring within the last two or three years, but have never reared from them one true gall-fly, though they have produced large numbers of male and female guest-flies—the male answering perfectly to Dr. Fitch's description of *C. q. arbos*. The female he had not seen.

4th. The galls I collected in June have not yet produced any guest-flies, but cutting open several to-day I found in one a large living larva—the others were empty or contained dead gall-flies that had not been able to eat their way out of the dried gall.

From the above facts I am forced to believe that the galls *C. q. tuber* and *arbos* Fitch are both produced by the same fly, and that it is the same species that I have described above and for which I retain Dr. Fitch's name, *C. q. tuber*. Dr. Fitch has, no doubt, described two distinct flies, for Mr. Walsh, who has devoted much attention to the guest-flies of the oak galls, finds that not only do some species live in several different species of galls, but that the same kind of gall may produce more than one species of guest-fly. (*Proc. Ent. Soc. Philad.* Vol. 2d, p. 465.)

Mr. Walsh, in the article referred to, mentions other of Dr. Fitch's species which he is satisfied are inquilinæ, and not the producers of the galls from which they were reared. (See pp. 464-5, 484 and 494.) His remark that "*C. q. tuber* Fitch is in all probability a guest-fly," escaped my notice till this moment.

QUERCUS MONTANA. *Hard, round galls, .25 of an inch in diameter with a finely papillose surface and a solid radiated cellular structure; growing sometimes on the upper, but as often on the under side of the leaf; attached to the larger veins by a very short pedicel.*

These galls are rarely met with, and I have seldom found more than one on a leaf. In a single instance there were three on the same leaf, two on the under side and one on the upper. My specimens were found in October and contained perfect insects. Through the gall of several.

gathered October 20th, the insect had eaten a passage but they still remain in the galls.* Each contains a single, subapterous, female gall-fly, closely related to *C. q. forticornis* Walsh, and *C. q. pezomachoides* Osten Sacken. Dr. Fitch's figure and description of the gall of *C. q. pisum*, (*N. Y. Rep.* Vol. 2. No. 319,) answers well for this gall, but his were from a different species of oak, and this gall-fly is very distinct from that he describes. Baron Osten Sacken informs me that these subapterous females have winged males and belong to the genus *Andriacus*.

I let this species stand with the related species named above and call it

***C. q. hirta* n. sp.**

Head black, vertex slightly rugose, densely hairy as is also the entire dorsal portion of the thorax; face pubescent, hairs converging towards the mouth; palpi shining brown, tips black. *Antennæ* long, slender, black, 14-jointed. *Thorax* black, very small, densely covered with a coarse, yellowish-white pubescence. No striæ visible on the mesothorax. They are concealed by the pubescence if they exist. *Feet* a dull brownish black, but in a strong light appear of a very dark reddish brown, posterior pair lightest and all somewhat paler at the joints. *The wings* are mere yellowish white scales. *Abdomen* large, black and shining, a short, close pubescence on each side of the 2nd segment and this and the remaining segments, except the first, bounded across the back and sides on the posterior edge by a belt of long, silvery white hairs. These belts are divided on the dorsal ridge by a shining glabrous line like the anterior portion of the segment. These belts are plainly visible without the aid of a magnifier. Length .14.

Six ♀ specimens.

New species of galls, the flies of which are, as yet, unknown to me.

QUERCUS CHINQUAPIN. *Gall a cone-like bouy, developed from the axillary leaf-buds, and covered when green and often when dry with a dense, rose-like cluster of imperfectly developed leaves. The cell containing the larva smooth, shining, oval, about one-eighth of an inch long, half immersed in the apex of the cone.*—*U. Q. FRONDOSA* n. sp. Gall fly unknown.

These singular and very pretty galls are developed after the summer growth of the tree is completed, and the axillary buds are formed. The

* November 29. A single fly was found in the box yesterday. It is quite active, and does not differ from those cut from the galls, showing those to have been mature.

sting of the insect causes the buds that would otherwise remain undeveloped till the following year, to develop in the autumn in the abnormal manner described above.

The rudimentary leaves are green, ligulate, and the more perfectly developed galls resemble, more than anything else I can think of, the flowers of the common *Artemesia* of the flower garden. They are not common, but I have several times met with them, and the clump of oak bushes from which my specimens were gathered was covered with them. The larvæ are now fully grown. On the same bushes I found a gall like *C. q. globulus* Fitch.—and several dry, brown galls on the petioles of the leaves, apparently those of *C. q. petiolicola*.

Q. RUBRA. Clusters of seed-like bodies, often thirty or forty together growing on the midvein on the under side of the leaves of *Q. rubra*. The larger cells are about the size of a grain of wheat. They are smooth, greenish-white, the apex enlarged, and would remind a botanist of the sessile stigma of some flowers.—*C. Q. DECIDUA*, n. sp. Gall fly unknown.

My specimens were collected about the first of October, and were then fully grown. Some had fallen to the ground, but on cutting open a large number I could not detect any larvæ. The leaf stems and twigs were placed in water to keep them green, but the galls soon dried and many fell off. A few fell into the water, and these not only kept green, but on opening them a few days since, half-grown larvæ were found. From this I infer that the growth of this species is dependent upon the galls being covered in the earth.

Gen. **DIASTROPHUS.**

DIASTROPHUS POTENTILLÆ, n. sp. Galls on *Potentilla Canadensis*. They are from .3 to .5 of an inch in diameter, and rather longer than thick, growing in the axils of the leaves; of a soft spongy consistence when dry, and each contains a single cell in shape and size like the nucleus of *C. q. globulus*, though not, like that, free from the substance in which it is enclosed. They are rather rare here (Conn.), but I saw large numbers of them in the northern part of Berkshire Co., Mass., last summer. The fly came out May 20th from galls of the previous year's growth. It is much like *D. nebulosus* O. S., but Baron Osten Sacken has compared it with this species, and pronounces it distinct.

Male.—Head black; vertex nearly smooth, the face black, finely aciculate, a ridge or carina from the vertex to the mouth, organs of the mouth with faintest possible tinge of reddish-brown. *Antennæ*: 1st, 2nd and 3rd joints black, the remaining ones dark cinnamon. 3rd joint not deeply incised, 14-jointed. *Thorax* black; collare hairy; mesothorax shining; two deep lines from collare converging towards the scutellum; space enclosed nearly smooth and hairless, with very faint longitudinal grooves. *Scutellum* sculptured, the basal pits large and deep. Lateral view of the scutellum shows as a cone, the axis of which is at an angle of 45 deg. from the axis of the body. *Legs* dark brown or black, coxæ black; femur and tibia yellowish brown, on the upper side darker tips of tarsi black or nearly so; pleura very finely aciculate. *Abdomen* briefly petiolate, shining black, 2nd and 3rd segments connate jointed. *Wings* pale dusky; veins heavy, none of them reaching the margin; vein forming the base of radial area with heavy brown blotch. 1st transverse reddish-brown; areolet small distinct; radial area open. Cubitus disappearing before reaching the first transverse. Length (dry specimen) .11.

Female.—*Antennæ* 13-jointed, legs a shade darker than the male, otherwise as the male, though as usual larger, .13 long. The ocelli form nearly a straight line on the head. *Abdomen* in male and female perfectly smooth and shining.

In Mr. Cresson's Catalogue of described N. Am. Hymenoptera, *Diplosis potentillæ*, Harris, occurs, taken from Dr. Harris' Catalogue of Ins. Mass. 2nd ed. I have not seen Dr. Harris' catalogue. Should my insect prove identical with his, I shall have only removed it to *Diastraphus*, the genus to which, without doubt, it properly belongs.

The following remarks and description were communicated to me by Baron R. Osten Sacken, for publication in this paper:

"In my paper entitled '*Additions and Corrections*,' etc., (*Proc. Entom. Soc.* 1862) I described a gall under the name of *C. q. strobilana* (l. c. p. 254), the producer of which was at that time unknown to me. Many months afterwards, I obtained the fly, by cutting the dry galls open. It belongs to the genus *Cynips* in the restricted sense (agamous according to Hartig), and I let its description follow:

***Cynips quercus strobilana* O. Sacken.**

♀. *Antennæ* 14-jointed; body dark brown, with a close, appressed pubescence on the thorax and along the hind margins of the abdominal segments; feet brown; anterior knees and tarsi reddish; wings hyaline; length from 0.17—0.22.

Head black, finely punctured and pubescent; palpi reddish; antennæ rather short for the size of the insect, 14-jointed; third joint about as long as the two first, taken together; fourth, fifth and sixth gradually decreasing in length, the seven penultimate joints being nearly as long as broad; the last segment is somewhat longer than the preceding, although not equal in length to the two penultimate joints taken together; it shows no indication of a sub-division. *Thorax* densely clothed above with a yellowish, appressed pubescence, which

does not prevent, however, from distinguishing the sculpture: the latter consists of a moderately dense punctation and several rather shallow grooves, two of which, running from the collare backwards, end about the middle of the thorax by a slight, smooth and flat expansion. Pleuræ black, punctured, except a smooth, shining spot in the middle; their lower part is pubescent. *Scutellum* punctured above, rugose behind and finely pubescent; the pits at its base are of moderate size. *Abdomen* pitch-black, in some specimens slightly reddish below and along the hind margin of the segments; its whole surface, except the base of the segments and a narrow, smooth line along the back, is clothed with a whitish, appressed pubescence; under this pubescence a moderately dense punctation is perceptible; the second (largest) segment of the abdomen hardly reaches its middle. The feet are dark brown, pubescent: the base of the femora, the knees and the tarsi of the foremost pair are reddish; in some specimens a reddish tinge appears at the base of the femora and on the knees of the two posterior pairs. *Wings* hyaline; the second transverse vein forms a knee which bears a distinct stump of a vein in the middle.

Seven ♀ specimens."

WATERBURY, CONN., Dec. 1864.