

tolic, the vessel is already completely filled, and being inextensible, can not expand further and therefore can not transmit the increase of inside or arterial pressure when it rises above the diastolic level. But I [Bleile] wish here to point out that if the pressure in the chamber is at the diastolic level and the pressure within the artery is also just at the diastolic level, then it does not at all follow that the artery must necessarily be filled with fluid. Since the artery is readily collapsible (though not elastic) it may be only partly filled, or it may be entirely flat and empty. It may be in any degree of fulness or emptiness. But one must know the amount of fluid within the artery before he can tell whether a rise in arterial pressure will be transmitted to the chamber. As a matter of fact, not unless the artery is completely filled with fluid at the diastolic pressure and the chamber pressure just equal to it is applied without allowing the artery to collapse the slightest amount, can the result obtained by Erlanger be possible.

In order to bring clearly before the reader the three sets of conditions described in the foregoing quoted paragraph, I analyze them here into the form of a table. In this table

Conditions	Initial Com-pressing Pressure	Initial Arterial Pressure	Com-pressing Pressure Increased to	Arterial Pressure Raised to	Resulting Compression Oscillation
Erlanger's.	Atmos-pheric (1)	Dias-tolic (2)	Dias-tolic (3)	Sys-tolic (4)	None
Bleile's 1st.	Dias-tolic (1)	Dias-tolic (1)	No change	Sys-tolic (2)	Any amplitude
Bleile's 2d.	Atmos-pheric (1)	Dias-tolic (2)	Dias-tolic (3)	Sys-tolic (4)	None

the numbers indicate the sequence of events. It thus is made obvious that Dr. Bleile's second set of conditions is merely a repetition of mine. And he admits that under his second set of conditions there will be no oscillations, which, it will be noted, is exactly the conclusion I came to. This result can be altered only by supplying energy not included in my premises. To be sure, no one can find any fault with the conclusion Dr. Bleile is led to by his first set of conditions, but they are not the set of conditions I chose to start with in

developing the theory of compression oscillations.

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THE CORRECT NAME FOR OUR APPLE-GRAIN APHIS

MUCH confusion has existed in regard to the name applied to our apple-grain aphid. In the first place the name *avenæ* which is now applied to this species in America was for many years applied to *Macrosiphum granaria*. These two species were eventually separated and *granaria* applied to the *Macrosiphum* on grains and grasses and the name *avenæ* restricted to the present species or group of species on the same plants.

To the apple-grain aphid on its primary host the name *mali* Fab. was applied. This name, *mali*, is, however, a synonym of *pomi* DeGeer, a species which was not well known in America. The alternation between grains and apple was worked out while the name *mali* was still in use for the species. When *pomi* became better known it was shown that the present species was not *mali*, i. e., *pomi*, but was in reality the same species as the so-called *avenæ* on grains. *Pomi* was then restricted to the true *pomi* and *avenæ* transferred also to the apple-feeding form of this grain aphid.

Fitch described a species under the name *prunifoliæ* which he found upon the plum. In this description he gave the characters of some specimens collected and placed in his cabinet. These specimens are now in the National Museum collection and show that the species he had was the one treated in this note. Before publication, however, he observed some other specimens on plum and these had a black spot on the abdomen. He therefore included in his description remarks on this spot. His specimens, however, show that he really had the apple-grain aphid in his collection and in his manuscripts as *prunifoliæ*.

On account of his mentioning this spot subsequent writers considered his specimens to be specimens of *pruni* Koch. This latter species has been shown to migrate to thistles and in reality to be a synonym of *cardui* L. Therefore recent writers have considered Fitch's *pruni*-

foliæ to be a synonym of *cardui* L. His name, however, must be applied to the apple-grain species to which we are in this country giving the name *avenæ*.

In Europe it is known that the name *avenæ* is a synonym of *padi* L. and that the primary host of the oat aphid is the bird cherry from which it migrates to grains and grasses. *Avenæ* is, however, employed here for the species living upon the apple. To use the names correctly then *padi* L. should be applied to our apple-grain aphid. But this would not be correct, for *padi* winters on cherry and migrates to grass. It is evident that our species is not *padi*.

Fitch described a species on choke cherries under the name of *cerasifoliæ*. This species curls the leaves of the cherry and suggests the work of *padi* in Europe. Transfers made by the writer prove that this species alternates between chokecherry and grasses in the same way that *padi* migrates in Europe. It is not impossible that they are the same species. We have then to deal with this species also on grains and grasses in the *avenæ* mix up. It is noteworthy that the cornicles of the chokecherry species are sometimes slightly swollen in a way similar to those of the common oat aphid. The second fork of the wing is also very close to the margin of the wing and rusty patches are present at the base of the cornicles of the individuals feeding on grains and grasses.

Some authors have expressed the opinion that our apple-grain insect is biennial. The experiments conducted by W. F. Turner and the writer prove that it is annual. It is not improbable that the difficulty in transfer arose, in that more than one species was concerned and that the apple was in reality not the winter host of the specimens transferred.

From the evidence in hand it appears:

1. That more than one species occurs upon grains and grasses under the name *avenæ* Fab.
2. That one of these species migrates to apple and related trees where the eggs are laid. This species must be known as *prunifoliæ* Fitch.

3. That another species, the oat aphid, migrates to bird cherries in Europe and must be known as *padi* L., of which *avenæ* Fab. is a synonym.
4. That the species now known as *cerasifoliæ* Fitch migrates to grains and grasses as does *padi* and is possibly the same species.
5. That the present placing of the name *prunifoliæ* as a synonym of *cardui* L. is not correct.

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QUOTATIONS

COLUMBIA UNIVERSITY AND PROFESSOR
CATTELL

I SHOULD think that the New York newspapers would be as tired of me as I am of them. As, however, you have devoted another editorial article to Columbia University and to my case, I beg permission to state certain facts.

My relations with the university were not considered by the department or faculty of which I was a member, or, contrary to your statement, by any faculty committee. At a meeting of the Columbia trustees on March 5 a resolution was introduced retiring me on account of a frivolous but truthful remark that I had made concerning the president of the university in a confidential letter to members of the Faculty Club. At the same meeting of the trustees a committee was appointed to ascertain whether doctrines contrary to the Constitution and the laws were being taught or disseminated at Columbia.

This latter resolution raised a storm of protest, the faculty of political science voting that it "betrays a profound misconception of the true function of a university in the advancement of learning." After passing resolutions of protest, the council, itself primarily an administrative body, appointed a committee of nine to defend the interests of academic freedom. This was not a committee of the faculty, but a Butler-Seligman committee, containing six deans, who are appointed by the president, and, according to the statutes of the university, must "act in subordination to the president." From this committee Professor