theria or lockjaw, no vaccine could be procured to protect the country against smallpox, and it would be utterly impossible to test such essential drugs as ergot, pituitrin, and digitalis.

Who some of the people are to whom the "anti" attitude is supposed to appeal is indicated by this published invitation from the head of one Anti-Vivisection Society:

I invite all Anti-Vaccinationists, Anti-Vivisectionists, Eclectics, Homeopaths, Chiropaths, Osteopaths, Naturopaths of all branches, Christian Scientists, New Thoughtists, Theosophists, Medical Freedomists, and all brave and honest physicians of the Allopathic School (who secretly denounce the machinations and conduct of the political doctors) to send in their names and enroll as active participants in an Association of Free People against Medical Tyranny.

As a matter of fact, the number of "brave and honest physicians" of any standing in science or in their profession who oppose reasonable animal experimentation, which is obviously what is here meant, is a minute percentage. The anti-medical people know this; but who can blame the layman if he begins to believe the statements sent out by societies now heavily endowed by a few rich adherents when he sees such assertions as one that eight editors of prominent magazines, which are named, had "expressed positive interest in the opposition to vivisection, or in favor of the exemption of the dog from experimentation," even though inquiry failed to find a single one of these editors who had expressed any such interest? When a similar statement was attributed to the famous surgeon William J. Mayo, it called out from him these words: "The trouble with the anti-vivisectionists is that they are not only dishonest but willfully dishonest . . . the truth is not in these people." These and other instances of false statement are recorded in a pamphlet issued by the American Association for Medical Progress in New York City.

The total result of the campaign against truth and scientific progress is to alarm the unthinking and insidiously to encourage them to refuse to comply with health precautions. The "antis" have failed to pass, in Colorado and California, laws which would forbid any kind of experimentation, even the administering of any drug to any animal if it gave him any pain. If this legislation

had passed, laboratory medical research would have stopped and, to quote the pamphlet already referred to,

no smallpox vaccine could be made in that State, and unless fresh vaccine could be brought in from outside first the children, and eventually the whole population, would be exposed to one of the most terrifying and deadly scourges known to man. If there were an outbreak of diphtheria in that State, thousands of children would die as they used to die before the days of antitoxin unless relief came from some other State where no such law was in force. The outlook for farm animals would be just as bad. If there were an epidemic of hog cholera, it would be impossible to check it unless hog cholera serum, the only known preventive, could be procured outside the limits of the State.

Lately this form of appeal to ignorance has turned from trying to pass State laws to promoting referendum action. The answer is obviously in the spread of enlightenment, and such men as ex-President Eliot, Dr. W. W. Keen, the veteran protagonist of medical advance, and the late Ernest Harold Baynes have through this Society done much to that end.

Why is it that the United States in 1923 stood third highest among over fifty nations in the number of cases of smallpox, with only India and Russial exceeding its bad record? Why is it that in this country Massachusetts had in that year only one-tenth of one case to every 100,000 of its population, while Montana had one hundred and ten cases to every 100,000? Why is it that the United States and Great Britain had over 32,000 cases of smallpox, while a region in northern Europe of equal areas had only 131? The answer of those who know the facts is that the "case rate | of smallpox in any community is a direct index of the degree to which universal vaccination is preached and practiced."

One need not be an alarmist because there have been in 1923 and 1925 local increases in smallpox. The only wonder is that they have not been greater in view of the negligence engendered by the propaganda of ignorant fanatics who attack the very bulwarks of modern knowledge. It has been said with a great degree of truth that "every case of smallpox in this country means a victory of superstition, ignorance, or carelessness."

Mechanical Music

By LAWRENCE F. ABBOTT

Contributing Editor of The Outlook

HREE or four weeks ago The Outlook published a musical letter from a reader in Massachusetts who wrote from "Halfway Farm" and spoke of himself-somewhat humorously, I suspect—as a "hayseed." He wrote commending the new department in The Outlook which reviews monthly the current phonograph records and piano rolls. His letter without egotism but with clearness discloses that he is a connoisseur of worth-while music. recent experience of my own strengthens my sympathetic assent to his commendation of the mechanical reproducers of music like the phonograph and the reproducing piano.

A family that I know intimately not long ago came into the temporary possession of a Victrola. It belonged to the girl friend of the young daughter of the family, and this daughter agreed to take care of the machine, which was in a somewhat bulky cabinet, while her friend passed through a period of home-

lessness and travel. With this Victrola came three or four albums of popular music, mostly jazz, some of it good and some of it bad. The first phonograph review which appeared in The Outlook of March 18 attracted my notice, and I bought some of the records which it approved-"Barberini's Minuet" and the "Motley" and "Flourish," arranged by Harold Bauer and played by him on the piano; two movements of "The Fire Bird" suite by Stravinsky, recorded by the Philadelphia Orchestra; the symphonic poem "Finlandia," by Sibelius, recorded by the Cleveland Orchestra; and a Hebrew dance and a Spanish dance for the violin recorded by Jascha Heifetz.

The evening that the records arrived the family gathered about the Victrola to try them. There was moderate approval of them from the young people, a boy and a girl of sixteen and seventeen, with one exception. The first movement of "The Firebird" was pronounced to be a terror! As a snap judgment I could not

wholly condemn this verdict. On a first hearing this movement seems to be merely a succession of unrelated growls by the double basses and the English horn. But what interested me was to find that these two young people played all these records, including the growly one, again, and then again, and still again, until little by little they were substituted for the jazz records, or, at any rate, for the more commonplace ones. Gradually the young listeners began to form a more considered, intelligent, and comparative judgment. It was even finally admitted that the double basses had something interesting about them, while the second movement of "The Fire Bird" suite eventually became a great favorite.

When The Outlook for April 1 appeared, the second review of records and rolls was examined with great interest. The result is that I am now trying to screw my courage up to the point of spending eight or ten dollars for either Brahms's Symphony No. 1 or César Franck's Symphony in D Minor, the first being recorded on five Columbia records and the second on four Columbia records. The purchase has not yet been made because the family is divided and cannot decide which luxury it shall indulge in-Brahms at ten dollars or César Franck at eight dollars. The young people incline to Brahms, but the elders, being familiar with his First Symphony, are tempted to experiment with César Franck.

The disastrous thing about this discussion, from my point of view, is that I may be compelled to squander eighteen dollars and get both symphonies. A friend, however, whom I consulted on the matter, tells me that to spend eight-

een dollars in this way would not be squandering money, but investing it.

The two young people whom I am trying to interest in good music are now eager to have a player-piano. But an electric piano of a really desirable make costs about as much as a fairly good sedan automobile, and their father does not own a business at all comparable financially with that of Dr. Samuel Johnson's friend Thrale, the brewer. On Thrale's death, says Boswell, Johnson, who was one of the executors, "appeared bustling about, with an inkhorn and pen in his buttonhole, like an exciseman; and on being asked what he really considered to be the value of the property which was to be disposed of, answered, 'We are not here to sell a parcel of boilers and vats, but the potentiality of growing rich beyond the dreams of avarice." So I am afraid that my young friends will have to content themselves with phonographic records. I comfort them by pointing out that the phonograph has at least one advantage over the playerpiano or reproducing piano because it can reproduce the voice, the orchestra, and the violin. The verisimilitude of violin reproductions on the phonograph is perhaps the greatest achievement of that machine. Almost every family which has any interest whatever in music possesses a piano, and the veriest amateur can get some pleasurable sounds out of it. But a violin in any but practiced hands is bound to be a source of distress to everybody except the enthusiastic fiddler. The difficulties of eliciting sweet sounds from the violin was once put in a nutshell by Dr. Johnson. "There is nothing, I think," he said one day to Goldsmith, "in which the power of art is shown so much as in playing on the fiddle. In all other things we can do something at first. Any man will forge a bar of iron, if you give him a hammer; not so well as a smith, but tolerably. A man will saw a piece of wood, and make a box, though a clumsy one; but give him a fiddle and a fiddle-stick and he can do nothing."

A friend of mine, an accomplished professional musician, objects to mechanical music, not only because so much of it is mediocre, but because he thinks it will destroy the interest in fine concerts. Of course he is right in believing that the music lover will get the finest cultivation and the finest enjoyment of the art from concerts when he has the time, opportunity, and money to attend them. But I think he is wrong in supposing that the phonograph or the player-piano destroys an interest in concerts. If Darwin could have had a phonograph, for which the records had been judiciously selected, in the country home where he did so much of his laborious scientific research, he would not in his old age have deplored the fact that the musical sense which he possessed as a young man had become atrophied from disuse.

At any rate, it may be pertinent to add that the young girl to whom I have alluded as having become interested in Harold Bauer, Stravinsky, Sibelius, Sarasate, Kreisler, and Heifetz through the Victrola, recently attended a recital by my professional friend who looks askance at mechanical music. The only number on the programme which she really enjoyed (and she enjoyed that one very much and discussed it intelligently) was one with which she had become familiar beforehand from a phonograph record.

The Musical Experiment at Rochester

Special Correspondence by BERRIAN R. SHUTES

N May 1, the Rochester Philharmonic Orchestra, under the auspices of the Eastman School of Music, gave a concert entirely of American orchestral works. Not only the excellent quality of the music heard, but also the principle which prompted this project, made it a notable affair. The Eastman School believes that for the proper development of native orchestral composers their compositions must be heard, and heard frequently, that the public may know what fine work is being

done and that composers themselves may profit by the lessons learned from actual performances. And it is the emphasis placed on this matter of giving composers a chance to hear their own works that makes this event unique.

The results showed what a demand exists for such a testing laboratory for American art. Fifty-four manuscripts were received, a most convincing proof of the vitality of our creative powers. Only seven of these works could be prepared for performance. But the seven

composers had the inestimable advantage of hearing their works rehearsed and publicly performed, a procedure absolutely necessary in linking up the theory of compositions and orchestrations with its actual practice. The final test of a musical composition is made through the ear, and no amount of study can take the place of the actual experience of hearing. That the Eastman School went into this matter in a truly philanthropic spirit is evident from its very generous course in supplying transportation and