

THE PIANO PLAYER **Ernest Newman- 1922**

A Defence of the Player Piano

For a musician to put in a plea for the piano-player in these days is to make a good many worthy people doubt his sanity or his honesty, or both. (It is a pity some more elegant and less ambiguous name cannot be found for instruments of this type. The term "piano-player" is sometimes restricted to the old style cabinet attachment by which the keys of the instrument are manipulated from the outside; and the term "player-piano" to the instrument with the playing mechanism inside. In this article, however, I shall use the term "piano player" to cover both types.) My own brief editorship, a few years ago, of a little monthly journal devoted to piano-players and the interests of those who use them brought me the charitable suggestion that I must be in the pay of a mysterious entity vaguely designated as "the makers," though it had been the policy of the journal from the commencement not to allow its editorial columns to be exploited for the benefit of this or that maker. Another playful little dodge of the anti-piano-player extremist is to doubt whether anyone who commends "mechanical instruments" can be a real musician. That also one can face quite cheerfully. If to praise the piano-player is to work one's own damnation, one has at least the consolation of being damned in excellent company. Perhaps I ought not to drag in the names of mere composers -such as Strauss, Grieg, Elgar, Scriabine, Max Bruch, Fauré, Humperdinck, Mascagni, Max Reger, Saint-Saens, Max Schillings, Balakirev, Debussy, Glazounov, Liapounov, Rimsky-Korsakov and Sinding-who have sung the praises of one or other of these instruments. Their evidence may be tainted; these abandoned fellows, together with conductors like Nikisch, Colonne, Chevillard, Landon Ronald and Sir Henry Wood, may also be, or have been when they were alive, in the pay of "the makers." But when we are told, especially by amateur pianists, that the piano-player is a soulless machine that no self-respecting musician would be seen sitting down to, we may remind them that some of the warmest commendations of it have come from pianists of the front rank, such as Busoni, Harold Bauer, d'Albert, Backhaus, Carreño, Dohnanyi, Arthur Friedheim, Gabriowitsch, Mark Hambourg, Josef Hofmann, Frederic Lamond, Wanda Landowska, Pugno, Sauer, Stavenhagen, Szanto, Rosenthal and Leschetizki. Many people will remember, again, a concert at Queen's Hall in 1912, at which the London Symphony Orchestra, conducted by Nikisch, accompanied Mr. Easthope Martin in the Grieg concerto, Mr Martin playing the solo part on a piano-player, while later Miss Elena Gerhardt sang some songs to the accompaniment of the maligned "mechanical instrument." In 1913 a similar concert was given in Paris with Chevillard, the Lamoureux Orchestra and a piano-player. It is evident, then, that whatever the average amateur or teacher may think of the piano-player, it is taken seriously enough by the composers, pianists, conductors and singers who stand at the head of their profession. The truth is that the opposition to the piano-player comes largely from people who have had no practical experience of the best it can do, and from pianoforte teachers who are afraid that their vested interests are in danger. But from whatever cause and from whatever source the opposition comes, it is futile. The piano-player has come to stay, and not all the contumely in the world will get rid of it now. There are already in England alone some fifty firms engaged in the manufacture or importation of these

instruments; and the number is certain to increase. The agents for the higher-class pianos in some towns will tell you that they can hardly keep pace with the demand for them. For good or ill, here is a new factor in the musical life of the country that will have to be taken seriously. Some perturbed musicians see in this enthusiasm for "mechanical instruments" the beginning of the end. My own view is that these instruments can in no circumstances do harm, and that a piano-player in every home—even the musical home, where everyone can play fairly well by hand—would be an unmixed blessing. But before I give a few reasons for the faith that is in me, let me try to answer some of the stock objections against the new instruments.

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The commonest complaint against the non-human piano-player is that it is "mechanical." If the instrument could find voice it might, I think, retort with *tu quoque* on the pianist or violinist or organist who so describes it. The piano-player, in fact, needs only the kind of defence—which is half an attack—that the lawyers make on behalf of people charged with libel. "My client," says the lawyer in effect, "did not say that the plaintiff was a lying scoundrel; but if he did say so, it is true. The plaintiff is a lying scoundrel, and we can prove it." So the advocate of the piano-player might say: "This is not a mechanical instrument; but if it is, so is the piano, so is the organ, so is the violin, and so is everything else out of which man makes his music." And an ingenious and well-briefed lawyer could, I imagine, make out a very good case for the piano-player, and take a good deal of the conceit out of the other side.

Does not more than half the progress of the human race consist in substituting machines for human limbs? The plough, rationally considered, is simply a mechanical appliance for digging up the soil infinitely better than the finger-nails could do it; probably primitive man began with his finger-nails, progressed to a bone, then to a pointed stick, and so on to the plough—a step-by-step improvement in mechanics. What is the wheel, again, but a vast multiplication of the strength and speed of merely human legs? What is the gun but a big fist at the end of an arm so many thousand yards long? What is the telescope but a mechanical eye with a longer reach than any human eye?

"Yes," the objector may say, "but these are scientific or utilitarian matters, We quite admit the function and the indispensability of mechanics there. We deny, however, that they have any such value in matters of art." Has he ever gone below the surface of the question? I am afraid not. For probably thousands of years man has been steadily increasing the quantity of mechanism he uses in order to make music, and the quality of the music has improved with the quantity of the mechanism—the improvement, indeed, only being possible in virtue of this increase. As in most other things, far too much superiority is attributed to nature over science and art. If a man wants a really "natural" musical instrument, free from any suspicion of the mechanical he will just have to whistle with his fingers. If he goes a step beyond that, he calls mechanics to his aid. Wagner fondly imagined that Siegfried, his pure, untutored child of nature was making nature's own music when he cut a reed and made a pipe out of it. As a matter of fact, Siegfried was using one piece of mechanism—a sword—to make another piece of mechanism—a shaped reed. And even Siegfried himself had to admit that the noise he made on this too primitive machine was horrible—

*“Auf dem dummen Rohre
Geräth mir nichts”*

and he had finally to resort to another and better piece of mechanism—a silver hunting horn, made, no doubt, by some Besson of the time.

‘Where, in truth, is the non-mechanical musical instrument? Start with the indispensable minimum—say a few pieces of metal or gut stretched across a hollow piece of wood, and plucked by the fingers. Does man stop there? By no means! The anti-piano-player puritans are always horrified at the substitution of mechanism for the hand of the performer; they miss “the human touch.” Well, string instruments have only become as expressive as they are in virtue of this substitution. Man first of all replaced the finger-tips by a plectrum, then he elongated his fingers, and softened the pressure of them, by means of a bow. The history of the best of the single instruments—the pianoforte—is the record of an incessant piling up of mechanism. After all, what is a pianoforte, in essence, but a dulcimer? Why all this elaborate mechanism for the mere striking of a piece of wire? Why not be satisfied with a little hammer held in the hand? Simply because the complicated mechanism of the pianoforte hits the wires better than the hand could do—is, in fact, an intensification of the human hand, as the wheel and the gun are intensifications of the human leg and arm. The anti-piano-player pianist is, in fact, a million removes from mere nature; he would be helpless without the huge box of mechanical tricks in front of him. In decency and reason, then, he ought to be less vehement against the mechanical piano-player.

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Very good, it may be replied; but when all is said, the piano is a piece of mechanism under the direct control of the human being, without whom it is nothing; whereas the piano-player is a machine pure and simple, in that the performer has less to do with the making of the music than the hand-pianist has, and if need be can be dispensed with altogether, as is the case in certain electrically driven instruments. Well, in the first place we do not admit that the manipulator of the piano-player is merely a mechanical performer. If that were so, all performances of the same work upon the same piano-player would sound the same, whereas we know that they do not. In the second place, it is quite true that in the piano-player the performer is relieved of all obligations with regard to keyboard technique.

But pianoforte technique is not music, but only a means for the making of music. Let us suppose, for the sake of argument, that an absolutely ideal piano-player could be constructed in which every variety of touch-nuance, every shade of feeling that a Pachmann or a Paderewski could effect through his fingers could be effected through the pneumatics. Will anyone contend that such an instrument would be less worth listening to than the pianoforte, merely because the hammers striking the wires were impelled from the inside by pneumatics, instead of from the outside by the impact of human fingers on the keys? Some way or other the wires must be struck; if the artistic results were the same, would it matter a straw how they were struck? Would it not, indeed, be a sheer gain to set free for pure purposes of expression the vast amount of nervous energy that the pianist now has to expend in merely making the notes sound? Technique, let me repeat, is merely a means to an end, that end being to make a number of wires vibrate in the precise way we wish them to. Strictly speaking,

technique has nothing to do with music in the artistic sense of the word it can be acquired by people without a spark of musical feeling in them. The acquisition and application of technique, then, being in large part a merely physical or mechanical affair, there is no need for us to look down upon those lovers of music-of whom there are tens of thousands-who, having no time to give to keyboard practice, gratefully accept the splendid service the piano-player renders them in this regard.

While we are on this subject of the general artistic status of mechanical music, a little digression may not be quite irrelevant. Some years ago a description was published in the musical journals of a mechanical violin that had lately been invented. About the same time there took place the first English performance of Strauss's Festal Prelude, in which the composer recommends the use of the aerophor by the brass players. Thereupon a certain musical critic was moved to write thus: "If the violin," (i.e. as a mechanical instrument), "a fortiori every other instrument of the orchestra. Only the other day Strauss, out of pity for the men of brass whom he had set to blow a reverberating blast in his Festal Prelude, recommended them to save their breath and use an aerophor-some sort of artificial inflator. Why not assemble all the instruments, couple them up with hammers, rubber bands and aerophors, actuate them with a perforated roll, and dismiss the superfluous sixty or eighty or a hundred performers?"

Why not, indeed, if it were possible? So long as we could get our music of the same fine quality, what would it matter how it was produced? Does it very much matter in art how an effect is made so long as it is made, and so long as it is the right effect? In music in particular, are we not always fancying we hear certain differences between this performance and that, whereas the truth is that we only see them? Musicians in general, and musical critics in particular, are fond of enlarging upon the differences between this man's playing of the violin or the pianoforte and that man's. I sometimes wonder whether, if we had to hear all our music from behind a screen or in the dark, and in total ignorance of the name of the performer, we could "spot" the right performer in more than one or two cases out of ten. I am not sure, even, that we should always be able to distinguish between the men of the first rank and the men of the second. In the concert-room, if John Jones plays the pianoforte badly he gets the full discredit of his bad playing, because John Jones carries no halo about with him to dazzle us as we look at him and listen to him. But if Pachmann plays badly it probably never sounds quite as bad as it really is-as bad, say, as the same playing would sound in the case of John Jones-because Pachmann always has his halo with him-that is to say, some of the badness of his performance would be covered up for us by a sort of unconscious incredulity on our part. Any regular concert-goer who will submit his sensations to a rigorous scrutiny will, I think, discover numberless instances in which the sensations of the ear have been confused or overlaid by the sensations of the eye.

So with the piano-player. It is difficult for the average man, when he hears a piano-player, and knows it is a piano-player, to listen with perfect open-mindedness no matter how hard he may try, the knowledge that it is a piano-player that is being operated upon colours his judgment somewhat. He is prepared to hear a "machine," and accordingly it is a machine that he hears. Imagination and visual memory play a much greater part in our auditory perceptions than most people think, as we soon discover when we submit ourselves to a test in which the evidence of the eye is excluded. Strange as it may seem, hardly one person in a score can tell, merely from the tone itself whether it is a Strad or a brand-new violin that is being played upon-as

was shown by some public experiments in Berlin a few years ago. I am confident that an experiment of the same kind with a piano-player and an ordinary pianoforte, each played behind a screen, would lead to a large number of wrong guesses as to which was which. I know of a case in which some song accompaniments at a public recital were played on a piano-player without anyone suspecting the fact, the instrument being so placed that none of the audience could see the keyboard. I have often heard pianoforte playing at a concert that, if I had not seen the pianist, I should have taken for a mediocre performance on a piano-player; and I have more than once heard, from behind a door, a piano-player performance that gave me no suspicion that a mechanical instrument was concerned in it.

In the light of these considerations let us look once more at the questions of the aerophor, the mechanical violin and the mechanical orchestra. The aerophor is a contrivance for getting the same amount of tone out of a wind instrument with a smaller expenditure of breath, thus enabling a tuba player, for instance, to hold on to a note for an almost indefinite time. Now let us suppose that the inventor of the apparatus had kept the knowledge of it simply to himself and Strauss, and that the aerophor had been used in the Festal Prelude that evening without anyone in the audience knowing about it. Would a single soul among us have been a penny the worse? We should merely have heard a number of long-sustained notes in the brass, for which the music would have sounded much better than when, as at present, the long notes have to be momentarily dropped and then taken up again. What earthly harm would this "machine" have done us? Would it not, indeed, have done us all a certain service? And would any deadly injury have been done us if a similar device had been attached, without our knowing it, to every instrument of the orchestra? Is not the objection to the aerophor simply another instance of the illegitimate interference of knowledge with pure sensation? I used to know a drummer who got an admirable effect in that one of Elgar's Enigma Variations in which the very faintest of drum rolls produces an almost imperceptible throb like that of a great liner. (The Variation is the one containing the quotation from Mendelssohn's Calm Sea & a Prosperous Voyage overture.) The drummer I have mentioned used to discard his drum-sticks at this point, and tap lightly and rapidly on the edge of the parchment with a couple of pennies. If the conservatives or the purists were to tell us solemnly that a drum ought to be played only with its proper sticks, and that to get a new effect by means of pennies was opening the door to no end of "mechanical devices" in drum music, we should all laugh at them. Why should we not be equally amused when purists hold up their hands in horror at the notion of a tuba player taking advantage of the aerophor to make his breath go a hundred times as far as it normally would? We might as reasonably object to the scientific shaping of the mouthpiece or the curving of the bell of the trumpet or the horn in order to increase the natural resonance of a vibrating tube of metal. Once more, so long as the effect is got, and it is a good effect, an effect that carries its own justification with it, what in the name of reason does it matter how it is got, by an old means or a new one? Surely even the oldest of the means we now employ must have been new at some time or other. After all, if the aerophor, that economizes the breath and so prolongs the tone of a tuba, or a resonator, that increases the tone of a stringed instrument, is a "machine," what is the mute but a "machine" for diminishing the tone and altering the quality of it? By all means let us get the best music it is possible to get; but let us not imagine that we shall improve matters by walking in the mists of illusion and sneering at this device or that device for being mechanical, when every device that is already employed in any instrument whatever

is mechanical. What is the cunning key apparatus of the flute, for example, but a calling in of mechanism to compensate for the natural disabilities of the human fingers?

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What precisely does the piano-player do? It simply adds, for a special purpose, another five per cent, or so to the enormous amount of mechanism already in the modern pianoforte. The object of this added mechanism is to spare the average lover of music the tedium of passing through a long course of finger exercises simply in order to play the notes. There can hardly be any doubt that this is a highly desirable thing. Not many people have the time to learn to play the piano well, and of those who have the time few will ever be capable of playing artistically. No one with much experience of pianoforte amateurs and of the piano-player can dispute that a reasonably good performance upon the latter is a more artistic affair than nine performances out of ten that one hears upon an ordinary pianoforte. I make bold to say that if we cut out the really distinguished artists of the pianoforte, a good performance upon a piano - player would give more pleasure to a musician than most of the performances he is likely to hear upon the hand-played instrument. First-rate playing is not so much a matter of technique as of feeling; and no amount of teaching or of practising can give the plain person that. All that the average young lady has done after five or ten years of hard work is to get her muscles into a certain state of flexibility and control. But if all she is to have as the result of all this labour is a technique, surely she may as well trust to the piano-player for that. Delicacy of touch, for example, is an affair of delicate and of instantaneous emotion rather than of muscular practice. But if the ordinary person is to play his Chopin without the subtleties of touch that a Pachmann can give to the music, then let us have the performance, I say, upon the piano-player, which, I admit, will not give us a Pachmann's touch, but at any rate will give us a performance more brilliant and more accurate than that of the ordinary person. If all he does is to play the notes with reasonable accuracy, then let us have the notes played with superlative accuracy by a piano-player.

If it be urged that the piano-player cannot produce all the exquisite artistic effects of a Pachmann, we cannot but agree. But then neither does the ordinary pianist produce these effects. If the objector, in his derision of a "mechanical instrument," means that no artistic results can be obtained from the piano-player over and above those of which the instrument is capable in the hands of the least skilled and least musical of performers, then everyone who has more than an elementary acquaintance with the use of the piano-player will disagree with him. There is as much difference between the performances of a good and of a bad performer on the piano-player as there is between the performances of pianists or violinists in general. I grant that there is a great difference at present between even the best piano-player performance and that of a first-rate pianist. No doubt after another hundred years of improvements in these instruments much the same difference will still be noticeable. But already it is possible for a piano-player expert to get much better results from his instrument than most people of an a priori turn of mind would be inclined to believe. I hope I shall not be misunderstood on this point. I am not contending that the piano-player is as good as, or ever will be as good as, an absolutely front-rank pianist; but simply that a good performer on a good instrument can produce, in many works, as artistic an effect as

any ordinarily good pianist can do. I say in "many works" advisedly, for there are certain pieces of music that the best piano-player of the present day cannot do justice to, while there are others in which it can make a better show than all but one or two pianists of exceptional powers. If the open-minded reader will go so far with me as to believe that the piano-player is an instrument with more artistic possibilities than it is usually credited with, I will cheerfully concede that it is far from being perfect as yet. But bit by bit, year by year, it will be improved. The instrument of today makes one wonder how anyone could ever have taken seriously the instrument of twenty years ago; and our present instruments will no doubt cause the same irreverent hilarity among the musicians of twenty years hence. Even now the makers could produce an instrument that would be more responsive to what a good musician demands of it in the way of gradations of tone and accent; but, for reasons which I can only hint at here, an instrument of this kind would not at present be a commercial proposition. If the motor that drives the spool with the roll & it were worked by another force than that of the feet, the physical exertion of the performer would be greatly reduced, and a larger number of nuances would be easily under his control. Even with the present system it would be impossible to get a greater variety of accents by means, for example, of a double tracker. The theoretical principles of this and other improvements are fully understood; what stands in the way of their practical realization is simply the commercial necessity of making a sort of universal instrument—one that shall not be too sensitive and too complex for the thousands of plain people who know nothing of music and whose powers of interpretation are limited, that shall be self-contained (it is not every house, for instance, that has electricity to run the motor) and that shall not be excessively dear. But for all that improvements will come one by one, and with each of them the present narrow margin between the human pianist and the "machine" will be cut finer and finer.

I would point out also that it is unfair to make comparisons between the best hand-playing and piano-player playing until the same amount of time and trouble has been devoted to the latter as has gone to the making of the former. Apart from the fact that probably not one piano-player user in ten thousand gives as much time to acquiring command over his instrument as the pianist does, we have to remember that if the tone is to be as delicately shaded by means of pneumatics as by hand-pressure, we need not only perfect pneumatics, etc., but the same sensitiveness in the performer's feet that the pianist has in his fingers. (It has been well said by an expert in *The Piano Player Review* that the ideal instrument would be one that combined all the best features of each of the best makes. At present commercial competition puts this out of the question; we shall have to wait until the patents expire.)

By our incessantly thinking along them, so to speak, the fingers have become such intelligent and sensitive servants of the brain that the slightest variation in the shade of feeling in the latter is instantaneously translated into a corresponding shade of tone quality. It is done without our needing to will it consciously. But only by long practice can so close an association be established between foot-pressure and tone. Theoretically there is no reason why playing with the feet should not be as capable of all degrees of shading as playing by hand. The ultimate problem is the same in each case—the communication of varying degrees of impact to a wire by means of hammers. The variations in the loudness and quality of the tone can only come from variations in stroke and pressure. Given an absolutely perfectly pneumatic player and a performer with as many different degrees of foot-pressure at his command as the

pianist has in his fingers (in addition, of course, he would have the accent levers), I can see no reason to doubt that playing in the one case would be as fine as in the other. At present we have neither the ideal instrument nor the ideal performer. It is possible, nay probable, that the ideal instrument will never become a reality; but the inventors will certainly get nearer to it each decade.