Modern "David" Treats Ills With Music

By EMILY C. DAVIS

Young David playing on his harp to drive the evil spirits away from Saul, King of Israel, has a modern counterpart in a Dutch harpist and psychiatrist, Dr. Willem Van de Wall. The modern doctor of music, however, has not only tried David's method of playing to the mentally sick, but he has found that music has possibilities that the Biblical boy hero never dreamed of.

Had Dr. Van de Wall been asked to give King Saul the benefits of musical treatment, he would probably have soon had the King singing with him one of Israel's beautiful old songs, rather than listening passively to the familiar strains.

More striking than this, Dr. Van de Wall induces mental patients to write musical plays, and to act, sing, and dance in them, according to their talents and physical abilities.

The simple idea of using music as medicine for mind and soul is ancient. It is one of the world's old discoveries, and harks back to Egypt and Babylon, to the Greek shrines of healing, and was remembered by physicians in the dark ages before the dawn of modern scientific medicine. The idea of using music in mental hospitals as a tool to arouse troubled minds and listless or rigid bodies to activity is a bigger discovery, and Dr. Van de Wall has been a chief discoverer and experimenter in this new field.

The early years of his musical career led the Dutch musician from the position of harpist in leading symphony orchestras of Europe to a place in the orchestra of the Metropolitan Opera Company. Watching the powerful effect of music on audiences and on the performers themselves, he began to wonder whether music could arouse beneficial emotions and desires in the inmates of prisons and mental hospitals-the two places where the people are out of step with society and need to face about and make a new adjustment to life. He began trying out some of his theories and they worked. In his present position with the Bureau of Mental Health of the Pennsylvania state government, he travels about the state bringing music into the institutions, and always making and applying new discoveries.

Human beings, well or sick, need music as a simple form of health in-



The fairy tale, "Snow White," works a new sort of magic. Mentally ill patients taking part in the play become gnomes, princesses, and witches and forget their unhappy isolation in their success as actors

surance, Dr. Van de Wall believes. For the person who is under heavy stress, music is a sedative. For the tired and depressed, it is a mental tonic. It is no patent medicine cureall. It cannot alone heal diseases of mind or body. But it can stir up latent energies and desires in the invalided, and it does have some effect on heart action, blood pressure, and glandular function, though its connection with such physiological processes is still not too well understood.

"Music does for the so-called abnormal mind identically what it does for the so-called normal," Dr. Van de Wall says. "It dispels the gloom of morbid isolation which delusions and hallucinations afford. It creates a direct, pleasurable, congenial, and beautiful environment in tones. It gives something much to be desired-esthetic sense-satisfaction. It overcomes the idler's state of indecision which is eating up the lives of thousands of people. It stimulates some of the drowsy patients to vigorous action, and many of the unsocial individuals to participation in socially constructive activities.

"Even those unfortunates who are too handicapped mentally and physically to fit into the normal scheme of efficiency and productivity demanded by society, find in the inspiration of music the power and the will to forget their weaknesses. They quickly drop their pathological moods and reflections, throw off their eccentric behavior, and sing, dance, act, and talk, exercising all the faculties they

have and often exhibiting more than they have shown in their previous abnormal condition.

"The appeal of music is so fundamental that with the least remnant of mentality left any one may enjoy music in some form or other, and also express himself in producing it, though this expression may be from a technical musical point of view without any artistic merit."

All of Dr. Van de Wall's hospital work is directed towards the goal of arousing the patients into a semblance of their former normal reactions to life. He comes into a ward, bringing a little portable organ. He opens and adjusts the little instrument, trying to be matter-of-fact in an abnormal atmosphere where several men are peering at him curiously, others are moving about with mechanical step, and some have failed to note that anything strange and new has come into the room at all.

He plays and sings a simple melody—"Old Black Joe," perhaps—not in the formal way that a concert singer would render it, but as it might be sung at home in the evening. He goes from one song to another, and presently voices join in, and the patients begin asking for the favorites, and faces lose the strange, alarming expressions. Before the little concert is over, a large percentage of these people who ordinarily keep themselves in desolate isolation are taking part in a social activity.

You might talk patiently for hours to some of these people, Dr. Van de Wall explains, (Turn to next page)

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A Tule Indian giving a dose of rattle music to a sick man. He also sings a medicine song

in an attempt to probe their difficulties and get no encouraging answers. They are too afraid or too suspicious or too apathetic to respond. But the melodies talk a familiar, reassuring language and they gain confidence. Even the patients who will not talk at all, begin to sway rhythmically to the tune of "Little Annie Roonie" and move their lips, and afterwards sometimes they will talk a little about their troubles, and give doctors and attendants a glimpse into their queer, distorted world. And knowing why a patient clings to his line of erratic behavior is the first step toward aiding him to readjust himself to the everyday world. The music has an appeal that is more primitive than the other arts, Dr. Van de Wall explains. That is its secret of reaching these mental cases that have slipped back into speechlessness or childishness.

The musical doctor tells of one woman who suddenly rose from her place as he was playing to a group of patients and sang one prolonged note and sat down. He played on for her, varying the music and watching; for he knew that she had become ill twenty-three years before over the study of music. In her complete breakdown she had thrown her sweetheart out of the door and tried to kill her mother. Dr. Van de Wall shifted to Wagner's themes, and presently she stood up and sang the opening bars of an aria with the poise and some of the skill of the trained opera star. She broke off

abruptly, and said, "I thought I was in the Berlin conservatory again, but I am only in the insane hospital."

To arouse an apathetic patient even to so small an extent is often a victory for the hospital wards, for it means a step up in the climb towards social activity and rational thinking. The next time, the effort to speak and act may be less intense.

Giving a musical drama with orchestral accompaniment, costuming, lights, chorus, dancers, and star performers might well seem an impossible task if the participants are all to be mental patients. Play production is difficult at best. Yet at Allentown State Hospital the patients gave "Snow White" with great success, and the story of how such a play is produced shows how musical therapy reaches out to "shut ins" and brings them out of themselves in varied ways

"To start with," Dr. Van de Wall says, "I select a number of patients representing, if possible, all the different types of wards, who will be benefited by taking part in the performance, or rather by taking part in the rehearsals. For hospital use, Shakespeare's famous saying must be changed from, 'The play's the thing,' into, 'The rehearsal's the thing.' The medical staff, of course, cooperates in the selection of the performers. These are then called to a number of editorial meetings where at a round table the play is written. We construct it as much as possible from the

players' suggestions as to dialog and action to fit the story, and so by this cooperative play writing we encourage thinking, imagination, and the outpouring of emotion along esthetic channels. After that come the rehearsals, and then the final performance is given, with patients and friends as audience.

"A single incident will illustrate the sort of personality changes that take place as the project advances. There was a sixteen year old boy who was sent in to the rehearsals. This boy Jack had come into conflict with the law and was at the hospital for observation. The judge wisely was waiting to know more about the boy's personality and the causes and cure for his delinquency.

"Jack interested me but I did not interest him. He demonstrated his antagonism by capturing a chair or two and hanging his arms and legs over the backs of the chairs so that they dangled to and fro like artificial straw limbs moving in the wind. Jack sat, and chewed gum, and refused to

help in the proceedings.

"Meanwhile the play reached the point where the father of the Princess Snow White complains to his second wife that she neglects her stepdaughter. The patient playing the role of the king proposed to say:

"'Why dost thou neglect my child?'
"We were discussing this stilted line when Jack stopped dangling and said, 'I know, I know.'

"I said, 'Well, Jack, what do you know?'

"He answered with a triumphant smile, 'I know all about it. Believe me, I know what that king has to say. He would say to his wife, "You have no motherly love for the child whatsoever. If I did not look after her myself nobody would."

"Amazed by this turn about, and struck by the dramatic line Jack had contributed, I asked how he thought of it. Whereupon that stolid, delinquent boy gave away the reason for the misery of life, the clue for which the court had been seeking.

"He said: 'I've been an orphan since I was a baby, and that is why I know all about it.'

"And after that Jack cooperated with the others, singing, dancing, going patiently through the laborious drills, simply because the fictitious Snow White, like himself, was deprived of motherly love. He projected his own (Turn to next page)

Sub Finder Not Yet "Sure Fire"

Rumors that the United States and other powers are willing to abandon submarines because a sure means has been perfected for locating them under water, even when "sleeping" on the bottom, seem to be without solid foundation. Information available indicates that the various types of supersonic listening gear, while moderately effective, are of too short range to be reckoned as generally effective from a military viewpoint. If, therefore, submarine construction is abandoned or restricted in the immediate future it will be a deliberate move in a peace program rather than the abandonment of an arm because it has lost its fighting value.

Statements have gained circulation lately that the British Admiralty has perfected a device for locating submarines at a distance. Such a device, if perfected, would, without doubt, mean the end of undersea fighting craft, for such boats are easy to destroy once they are located. But the range of the listening gear used in all navies of the world so far as known is to be measured in mere hundreds of vards rather than in miles. so that unless the sea were literally peppered with scout boats many submarines would be bound to escape detection.

Most of the locators of "silent" submarines known to military students depend on the propagation through the water of beams of soundwaves so short as to be inaudible to human ears - the so-called supersonic or ultrasonic waves. These can be produced from electrically excited crystals of quartz, somewhat similar to those used in radio broadcast stations for frequency control, but larger. These waves differ from ordinary sound waves in that they can be directed in a comparatively narrow beam, like the rays of a searchlight. They reflect as echoes from solid objects, and parts of these echoes are picked up by the listening gear on scout ships, amplified, and interpreted by observers. Similar devices, using audible sound waves, have been used for a long time in the wellknown sonic depth-finding apparatus.

Work on supersonic submarine locators began during the World War, and has been carried on ever since, particularly by France, Great Britain and the United States. During the war their information was more or less pooled, but since then the researches have continued independently in each country. It is believed that progress in this country has been about equal to that abroad, although

necessarily most of the information about the technical details of the apparatus is kept confidential.

From time to time wild stories get into circulation crediting supersonics with destructive power verging on the supernatural. These seem to be based on the experimental work on extremely short-length supersonic waves carried on by Prof. E. W. Wood of the Johns Hopkins University and Alfred L. Loomis, in the latter's private laboratory at Tuxedo Park, N. Y. This work, following observations made by Prof. Wood in the laboratory of P. Langevin at Toulon during the war, has shown that it is possible to kill small animals and microscopic plants with "rays" of supersonic waves in water. But they do not kill anything bigger than a tadpole or a goldfish, and they are never used in more than half a pint or so of water. So that using them to sink a submarine in the ocean, or to kill her crew at the distance of a mile, is quite out of the question. The significance of the supersonic researches of Prof. Wood and Mr. Loomis is not military, but purely scientific.

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experiences and sorrows into the drama. All the energies that had been monopolized by his resistance toward a difficult world were liberated, and he set them to work in the appealing and social undertaking of the fairy tale play."

The presentation of such a play is less important than the rehearsals, Dr. Van de Wall has said, and yet the evening of the performance brings more acute sensations and emotions to both the performers and to the patients who act as audience. Music's stimulus to the ear causes other senses to function in an increased way, he explains. And the music hall caters to most of the senses. There is color and light and the softness of velvet chairs and traces of perfumes. And on the stage there is the drama of love, conflict, and victory with the music intensifying the whole emotional tone of the events.

Music is the most powerful of the arts to evoke emotion, but even

music gains when it is thus allied to poetry, dance, and drama, the musician explains. The old Greeks made Apollo, god of music, also god of medicine. His son Aesculapius gained even greater fame in healing, and his daughters the Muses, linked poetry, drama, music, and the dance into one sisterhood. The whole family, in fact, resembled a family of mental therapists, and they are still indispensable to every mental hospital.

There has been a good deal of experimentation to see whether different rhythms would bring about specific changes in heart action or blood pressure or nervous energy. In time, it has been hoped, a science of musical therapy might be founded.

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Dr. Van de Wall uses a wide variety of types of music in his informal concerts. A piece of music may have a different effect on different listeners, or even a different effect on the same listener at various times.

"The value of a musical composition as medicine," he states, "depends on

the influence it has on a certain individual or patient at a certain time in his particular life or state of disease. What kind of music will stimulate a patient, his energetic impulses, his physical and mental powers, feelings, thoughts and actions, depends, to a great extent, on his history and personality make-up. In the case of the patient, the physician, using the gauge of his experience, is the judge to decide about the curative value. The business of the musician is to cooperate with the physician in what could be called the musical prescription and application.

"The music serves as a stimulant of physical, mental, and moral energy and it is an essential medicine in the treatment and care of the physically, mentally, and morally weak, whether they are in an institution or not."

And creating harmonies and melodies is stronger medicine than listening, this musician to the sick has found.

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