

which particular effects are subordinated to an ambitious general design. It has the abandon, but also the supplication, of its Negro and Jewish origins; its first section almost grasps at nobility, even as its second scrapes against vulgarity. It is no thug in evening dress, however. In this composition, as in Roger Sessions's symphony, the music that has grown out of jazz—and, incidentally, outgrown it—achieves a status as a means of genuinely artistic expression.

Copland's "Music for the Theatre" is a music of nervous tics, of harsh plangency, of adolescent unrest. Of his ballet dances the first and the third ("Dance of the Adolescent" and "Dance of the Street-Walker") are something more than interesting experiments in polyrhythm and polytonality. They are, to the trained, unprejudiced ear, essentially a simple music. The concerto, on the other hand, is a highly complicated work. After the press riots that greeted it in Boston and New York, I was privileged to examine the orchestral score. It is a precise, careful document. Happening to discuss sym-

phonic jazz with a leading Italian composer,—a man of considerable experience as a conductor in Europe and the United States,—I showed it to him. "This fellow is no amateur," was his comment. "He knows what he wants to say and how to say it. Most jazz composers are illiterate."

If jazz is to find its place in the more permanent repertory, the way seems to lie appreciably along the path over which Copland's experiments have taken him. It was appropriate that he should have been chosen, together with Henry F. Gilbert, to represent the United States at the International Musical Festival this year. Gilbert, long before the Gershwin-Whiteman régime, was using Indian and Negro themes in the production of a native music; Copland, ignoring totally the commercial and the more consciously nativistic aspects of the new style, made of it a personal idiom and at once gave new dimensions to the mode. He may still be regarded as an aim rather than an accomplishment, but he clearly has direction and momentum. Among the youngest of our composers, he is also among the most original.

Medicine

ASTHMA

BY MARK J. GOTTLIEB

ASTHMA is not a disease. It means simply that something is wrong in the body. It is a spasm of the muscles of the bronchial tubes leading to the lung, or it is a swelling of the mucous membrane lining the inner surface of the tubes. This spasm or swelling does not greatly interfere with the entrance of air into the lungs, but does interfere with it leaving them. It is frequently preceded by coughing. During the attack there is much noise in the chest, and that noise is best described by the word wheezing. The lips become blue, and if the attack is severe and prolonged the entire body may become the color of a blueberry. This color is due to the inability of the sufferer to ærate his lungs with fresh air.

To obtain more air, he may grasp the foot-rail of his bed and so bring all the outer muscles of his chest into play, or he may lean out of the window. At the end of the attack, a quantity of viscid mucus may be expectorated. The seizure is terrifying to the patient because of his feeling of impending disaster, but death rarely occurs, for the muscles of the bronchial tubes become exhausted in time and relaxation follows, terminating the attack. Asthma is very often associated with hives, eczema, hay-fever or spasmodic swellings of the face and hands.

The shortness of breath due to heart disease is quite different. In heart disease the difficulty in breathing is due to the inability of the heart to pump blood through the blood vessels of the lungs with sufficient rapidity to insure its proper æration. There

is no obstruction to the free movement of air. The breathing, in fact, is more rapid than normal. But the shortness of breath which occurs in severe kinds of kidney disease is very similar to that observed in asthma and is called uremic asthma. Such attacks are always associated with definite and marked abnormalities in the urine and blood.

The causes of asthma are many. They are divided in two great groups: those that lay the foundation for such attacks and those that precipitate them. Most sufferers from asthma are born with a tendency to it. It occurs in families and therefore may be said to be hereditary. But because of this fact, the sufferer should not feel inferior to persons not affected, for some of the most brilliant men and women in history have been asthmatics. The causes that precipitate attacks are numerous and varied, and may be roughly enumerated thus:

1. The patient may have an idiosyncrasy to foods, to animal hair, feathers or scales, to sachet powders, to certain tooth-pastes and powders, to bacteria, to pollens, or to drugs such as ipecac, aspirin, quinine, morphine or tobacco. The methods of determining this susceptibility are highly technical, but the tests are valuable when properly interpreted.
2. The attack may be due to some abnormality in the digestion of foods. Poisons may be formed, which, when absorbed, may cause a spasm of the muscles of the bronchial tubes, bringing on asthma.
3. Chronic infections, as in the nose or tonsils, or abscessed teeth, or chronic gall-bladder inflammation, or chronic appendicitis may so disturb the normal balance of the body cells as to produce an attack.
4. Climatic conditions may also produce attacks. Sharp and sudden changes of temperature and strong winds have been known to bring them on.

The peculiar constitutional make-up in the asthmatic cannot be altered, but the factors responsible for the attacks may be eliminated or the sensitiveness to certain substances may be so lowered by treatment that the attacks are prevented or markedly diminished. By this means the great majority of people suffering from asthma may be helped, and so the patient has a right to be optimistic regarding the possibility of relief, if he will only give his physician

time and opportunity properly and systematically to investigate his case. This investigation should cover the following:

Tests of the patient's susceptibility or idiosyncrasy to the various poisons and other substances that cause asthma.

Examination of his nose, throat and teeth.

X-ray examination of his chest.

Examination of his stomach and intestines.

Examination of his blood, urine, sputum, stool and nasal discharges.

If the patient is found to be sensitive to chicken or duck feathers, his feather pillows should be replaced by air pillows or pillows filled with silk floss. Should he react positively to horse dandruff, an extract of it, injected in gradually increasing doses, may be effective in arresting his symptoms. Rabbit hair, which is a common cause of asthma, is often used in stuffing quilts and upholstery. It should be eliminated as far as possible from the environment of the sufferer. If this cannot be accomplished, an extract of rabbit hair, used in the same manner as the horse dandruff extract, will be efficacious.

If the asthmatic is found to be sensitive to one or more foods and they can be eliminated from his diet, the problem is easily solved. When, however, he is susceptible to foods which are constantly used in cooking, such as milk, eggs, or wheat, the business is not so simple. The offending food should not be eaten. In addition, some method of rendering the patient less susceptible to it must be used. One method is to dilute it to a point where no symptoms occur after administration by mouth, and then gradually increase the dose by mouth until a tolerance for larger quantities is developed. But this does not work as well as giving an extract of the food by injection under the skin in gradually increasing doses.

If no susceptibility is discovered, or if, on the elimination of a substance to which the individual is found sensitive, symptoms still continue, a vaccine of the bacteria found in the sputum and nasal discharge, and possibly in the intestinal contents also, may be given in gradually

increasing doses. This treatment very often stops the attacks, but it may have to be repeated. In the event of failure of the two measures mentioned, it is a good plan to make an effort to remove all possible sources from which pus or its products may be absorbed by the body. If any of the cavities adjoining the nose are infected, they should be opened and drained. If the tonsils are diseased, they should be removed. Should disease be found around the teeth, it should be eradicated, and so on down the line.

If no result is obtained by this last procedure, there is still another form of treatment which should be given a trial. This is called non-specific therapy. It consists of injections of peptone, typhoid vaccine, boiled milk and numerous other preparations. All these produce fever. Some give chills first, followed by fever. The results are often surprisingly good. All these devices may be combined with exposing the body to artificial sunshine and regulating the diet in accordance with the findings of the chemistry of the blood. It may be necessary to have the intestines irrigated

twice weekly with physiological salt solution.

As a last resort the patient should move to another climate. But it is unwise to change the location if all causes are not eliminated first. For instance, it would be unreasonable of a mother whose child was suffering from a sensitiveness to eggs to move to a new location and still continue to feed the child eggs. Certain drugs are useful during an attack. One of the most useful of these is adrenalin chloride, given under the skin. But it should not be given if the heart is weak or the patient is suffering from hardening of the arteries and high blood pressure. Morphine takes the terror out of an attack of asthma, but its use should not be encouraged, as it is a habit-forming drug.

The inhalation of the fumes from the burning of stramonium leaves and potassium nitrite gives a great deal of relief for the immediate attack. These drugs form the basis for all asthma powders. But the patient should beware of cure-alls. His physician is always the best guide to the proper course to pursue.

ADVOCATUS DIABOLI

BY ADOLPH E. MEYER

WHEN, on a frigid day in January, 1855, the Rev. Noble Brann emitted his humble thanks to God for having hallowed his household with an infant son, the good gentleman little realized that God was in an ironical mood, and that he was being pitilessly duped. For, despite the purifying insulation of a pious paternal environment, the new-born William was destined eventually to enroll as a shameless disciple of Satan. Tragically and unwittingly the lad's mother played a part in bringing about his unforeseen apostasy. Her untimely death, when he was but two-and-a-half years old, completely disrupted the Brann home. So thoroughly, indeed, did it demoralize her reverend relict that he found himself unequal to the task of rearing little Willy, so the boy was handed over to Pa Hawkins, a laborious peasant of Coles county, Illinois, and a good Christian of the sterner, straight-laced variety. For the next ten years William stayed with his foster-father. It was a decade of toil and while it rolled wearily on the boy gradually learned that while Pa Hawkins was without question a God-fearing man, he was nevertheless much more appreciative of the immediate needs of his hogs and horses than of the remoter surgings of adolescent boyhood. So, one dark night, William Cowper Brann quietly slipped away.

Endowed with the peculiar vocational versatility that has been typical of nearly every self-made American, young Brann confidently started upon his life career as a bell-boy. From that profession he emigrated in more or less rapid succession to the status of painter, grainer, drummer,

printer, reporter, editorial writer, and finally owner of his own periodical. Meanwhile, he undertook the task of filling in the rather conspicuous holes of a neglected education. These were large, for Pa Hawkins had never been more than a lukewarm friend of learning. Brann's pursuit of culture was, however, without the friendly help of the handy night-school, or correspondence-school, both now so common. Thus he was thrust into the dual rôle of learner and teacher. After a fashion this self-instruction of his was successful. For today his collected writings require a dozen volumes to hold them, and his vocabulary is rated as larger than that of any other writer ever heard of South of the Potomac. The reader who dares to approach him without a dictionary of phrase and fable at hand is either very learned or very foolhardy. Brann was a colossal reader, and he had a perfect memory.

Of the various vocations at which he tried his hand that of the newspaper man made the strongest appeal to him. Gradually he worked up a considerable reputation as an editorial writer on the smaller Illinois papers. Then he wandered to Missouri, where he wielded his pen for the benefit of the once-eminent *St. Louis Globe-Democrat*. Finally he landed in Texas. In the Lone Star State there were, at that time, hardly more than three newspapers of any appreciable glory. In point of news the *Houston Post* and the *Galveston-Dallas News* ranked first, and of the two, the *Post* was the more stalwart. It was the favored journal of the haughty Houston *noblesse*, and was immaculately conservative. Beside its news items, it also ran the usual