therapy in pneumonia and other diseases where anoxæmia is present.

We have in anaesthesia and inhalation therapy related specialties, the latter the natural outgrowth of the former. They could be considered two phases of the same specialty.

In the practice of anaesthesia the majority of patients are referred by the surgeon, although the time is not far distant when the patient will insist on choosing his own anaesthetist. In the practice of inhalation therapy many patients come directly from the public.

The outlook for the future of professional anaesthesia is bright. The maximum protection for the life of the surgical patient is bound to win. When the truth is fully known no half-way measures will be tolerated by the patient whose life is at stake. The rapid strides made in the past twelve years under the guidance of our Secretary-General, Dr. F. H. McMechan, has placed the specialty upon a foundation so firm that economic storms will not be able to wreck it.

During the past few years the number of professional anaesthetists in the United States and Canada has increased from four or five hundred to an estimate of two thousand, and international relations have been established with anaesthetists of foreign countries.

The specialty of inhalation therapy is as yet in its swaddling clothes and perhaps it is presumptuous to speak of it as a specialty before it has made further growth. However, I feel that you are the ones who are to foster and nourish it and assist in its development.

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PRELIMINARY NOTE ON A NEW METHOD OF RECORDING BLOOD PRESSURE WITH PRESENTATION OF A MODEL.

By Daniel R. Barr, M.D., Rochester, N. Y.

Abstract.

The distinctive novelty in the new instrument described (Tycos Recording Sphygmomanometer, Levin patent) lies in the method of moving the kymograph. In the past, the writing surface in this class of instruments was moved at
a uniform rate of speed by a clock works or motor, but in this device, the chart, which is circular, is made to revolve by the collapse of a flexible metal chamber which is in communication with the pressure cuff on the arm. A second cuff placed directly below the other, communicates with an oscillometer to which is attached a pen arm and pen and which traces the curve on the chart. The travel of the chart is synchronized by the pressure decrease in the cuff and the chart bears marginal calibrations indicating the pressure in millimeters of mercury, thus permitting the systolic and diastolic pressures to be read directly from the chart.

The instrument is extremely easy to use and the application no more complicated than with the usual type of indicating sphygmomanometer. The cloth sleeve containing the two rubber cuffs is placed about the arm just above the elbow, care being used to assure the proper placing of the cuffs. Air is now forced into the entire system with a small bulb until the artery is constricted sufficiently to obliterate the lumen. The leak is then opened and the system is allowed to deflate. The chart commences to revolve and the pen traces a smooth line until the oscillations begin to occur in the lower cuff when a spike will be noticed to arise from the line. This will point toward the periphery of the chart and is the index of systolic pressure and corresponds with the first snapping sound heard through the stethoscope in the auscultatory method. As more and more of the artery is opened by the blood column and vibrations increase in size, thus causing longer spikes in the curve until a maximal is reached, when there occurs a more or less sudden diminution and later the pen traces an almost straight line as at first. At the point where the rapidly decreasing spikes show a tendency to become of the same height is read the diastolic pressure. Sometimes one or two later spikes will more nearly coincide with the beginning of the fourth phase as heard when using the Korotkoff method. This will differ somewhat from the point taken at the disappearance of all sound as that occurs much lower in most patients. The criterion of choice is the Ettinger or beginning of the fourth phase.

Serial curves can be run on the same chart up to nine or
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ten tracings. To accomplish this the adjusting screw on the pen arm assembly is simply turned through a small arc thus causing the pen to write a new path. Serial curves thus developed are of the greatest interest and importance in anaesthesia and in experimental psychology.

In judging a set of curves it must be remembered that successive systolic pressure will be somewhat lower in the conscious patient as the psychic effect diminishes and that the diastolic pressure is apt to rise, due to the stasis in the arm distal to the cuff. This latter is minimized if the cuff is re-adjusted at intervals.

The instrument is portable, can be used in almost any position and is extremely rugged. All accessories are packed in the case. Its accuracy is much greater than with indicating instruments and the taking of the tracing can be safely entrusted to the nurse or office assistant.

RESULTS WITH THE DWIGHT-FROST CARDIO-RESPIRATORY TEST IN DETERMINING MYOCARDIAL INSUFFICIENCY

By Allan Eustis, M.D., New Orleans, La.

ABSTRACT.

RESULTS of three years' experience with the Dwight-Frost Cardio-Respiratory Test in routine office work tends to prove that it has distinct clinical value. The original technique of Frost was followed until the past six months, when Steps 6, 7 and 8, only, were used, and these three steps are sufficient to determine the tone of the heart muscle.

SUMMARY.

1. The Dwight-Frost Cardio-Respiratory Test is a valuable aid in the diagnosis of myocardial insufficiency.

2. For this purpose Steps, 6, 7 and 8, of the test are deemed sufficient, and a modification of the original technique to meet the requirements of the anaesthetists is proposed.

3. A poor response to respiratory strain in Steps, 6, 7 and 8, with a falling base line is considered suggestive of myocardial weakness.

4. Case reports with accompanying charts on patients followed over periods of a year or two, demonstrate that the