

A Spencer Orgabia equipped with two of the new Spencer Air Flow Regulators and Mulflers.

This simple device, easily installed on any standard Orgobio, automatically regulates the flow of wind to the demands of the organ.

It also eliminates the transmission of "wind-rush" noise from the blower to the organ chambers.

THE SPENCER ORGOBLO

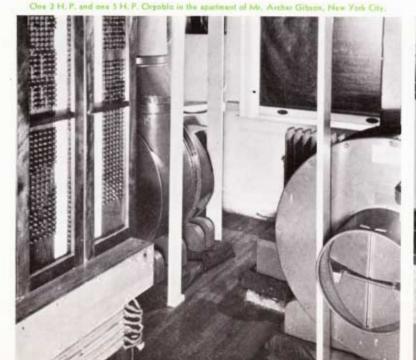
O MEET the demand for a high grade and thoroughly first-class organ blower, the Spencer Turbine Company has developed the Orgoblo. The Orgoblo is not a machine which has sprung up overnight, but is rather the fruit of over thirty years' experience in designing, producing and constantly improving organ blowers.

Over this period much valuable experience and information have been obtained, and it is by the intelligent use of this knowledge that the Spencer Turbine Company has arrived at an organ blower which enjoys the confidence and support of a great majority of those who are vitally interested in this field.

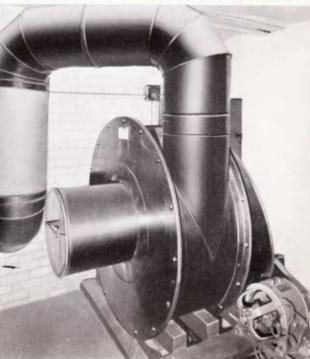
RELIABILITY

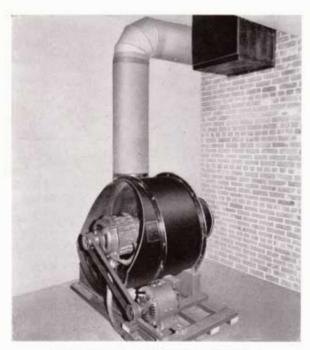
Let us now consider some of the individual characteristics which are desirable in a good organ blower. In the first place, reliability is a very definite requirement. With this point in mind, the Spencer Turbine Company has left nothing undone in its efforts to build a blower which may be depended upon at all times. It is for this reason that, although they buy a quarter of a million dollars' worth of motors each year, and can probably buy them cheaper than any other similar manufacturer, Spencer does not take advantage of this ability to buy cheap motors, but rather turns its savings through quantity purchasing toward the obtaining of better and more dependable electric motors.

All of the motors which are used on the Orgoblo are built especially to meet the requirements, careful thought being given to quietness, coolness of operation, and performance. These motors are built in extra



71/2 H. P. Orgobio installed in the Allyn Theatre, Hartford, Connecticus





10 H. P. Orgobio installed in the Central Baptist Church at Hartford, Connecticut

large frames with over-size bearings and very heavy shafts, so that they are exceptionally sturdy and very quiet in operation. This same policy of providing large factors of safety is carried throughout the construction of the blower. In the construction of the fans, deflectors, and in fact, all integral parts of the machine, great care is taken to make sure that they are amply strong and have heavy overload capacities.

QUIET OPERATION

Another essential feature of a successful and satisfactory organ blower is quietness of operation. No one when listening to an organ concert or recital wants to hear the hum or whir of the blower which is supplying the air. Realizing this, the Orgoblo has been made as nearly noiseless in operation as possible. Extensive experiments have been made in the transmission of sound and in the various methods for overcoming and eliminating all noises

which may be encountered in a running machine. In doing this Spencer starts with the motor, making sure that it is of exceptionally quiet operation. So-called "general purpose" motors, such as are used for driving machines in factories and similar installations, are entirely unsatisfactory for organ blowing work. Consequently each motor is built especially for its work and given a very careful test for noise and vibration before it is installed in the blower. Then, after the blower is completely assembled, another thorough examination is made to make sure that the entire equipment is free from noise and vibration.

EFFICIENCY

The third desirable point in an organ blower is efficiency. It is essential that a blower should be as thoroughly efficient as it is quiet and reliable. For this reason the Orgoblo has been developed along the lines of a thoroughly scientific centrifugal turbine. If you will inspect the phantom view (page 5) showing the standard Orgoblo construction, you will notice how the uniflow principle is worked out.

The Orgoblo has been carefully designed so that the air follows a smooth and continuous path in passing through the machine. In this manner a great deal more efficient operation may be obtained than where the air flow is reversed or stopped between each stage. By the use of carefully designed guide vanes and discharge channels, the air is conveyed from the periphery of one fan to the intake of the next with practically no loss. This gives the result of an exceedingly efficient machine with a splendid overload capacity to meet any unusual or sudden demand which may be placed on the equipment.

Another advantage of the turbine type of construction is that the power consumed by the motor is almost directly proportional to the load which is placed on it. Any one familiar with an organ installation realizes that the blower load is a continually varying load, depending on the type of music and the whim of the organist. Accordingly, it is essential that the blower be so designed that it will meet any demand that is placed upon it, and at the same time do this efficiently and economically. Numerous tests made on various blower installations have shown that the power consumed by the machine is almost directly proportional to its load. Thus, if the motor is running and no wind is being used, the power consumed is very low, only just enough to overcome the frictional losses of a moving machine. As the load is increased the power increases also, so that the actual cost of operation is maintained at a very reasonable figure indeed.

SERVICE

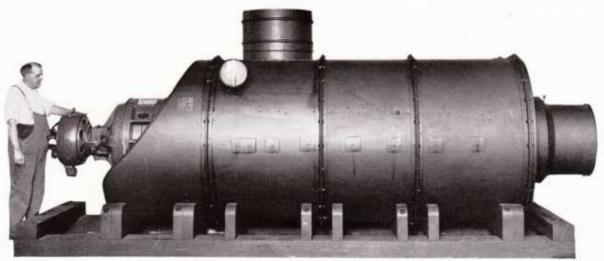
The combination of the finest blower Spencer can build, with a very broadly interpreted guarantee, places the Orgoblo



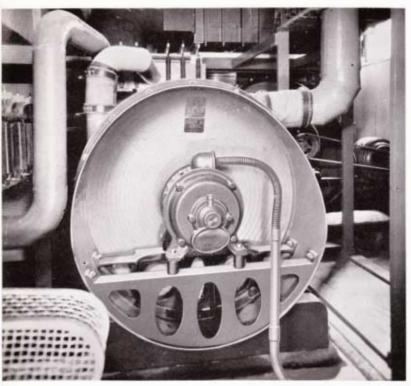
Phantom view of Orgoblo, showing continuous, uninterrupted flow of air

in a position which is not approached by competitive machines. The service policy of the Spencer Turbine Company has always been exceedingly liberal and its numerous connections throughout the country enable Spencer to render prompt and efficient service on machines in almost any location.

After careful consideration of the above, you will unquestionably agree that even



100 H. P. Orgobio installed on the Barton organ at the Chicago Stadium, Chicago, Illinois



10 H. P. step-up Orgobio installed at the DuPont Conservatory, Longwood, Pennsylvania

though the Orgoblo may cost a few dollars more than some other machine, in the long run it is by far the most economical machine to purchase. There are installations everywhere which have been in operation twenty-five years and longer, requiring practically no attention whatever other than occasional lubrication, etc., which, of course, any machine would require. If you will take pains to look around somewhat, you will find that the great majority of organs in America are blown by Orgoblos. Not only are most of the large and well known instruments equipped with the Orgoblo, but you will also find legions of smaller ones everywhere giving efficient, dependable and satisfactory service.

TESTED

On the back page is shown one of the several testing boards by means of which every Orgoblo is carefully tested before shipment. Errors of one-thousandth of an inch in some parts of the machine are sufficient cause for rejection by the tester.

A complete record is kept of the performance of each Orgoblo. The volume of air supplied, the pressure maintained, the speed and electrical input are accurately measured at 0, 1/4, 1/2, 3/4 and full load. A special test is also made to insure freedom from noise and vibration.

In buying an Orgoblo, the customer is protected against obtaining an imperfect or carelessly constructed blower which might be injurious to the organ and expensive in upkeep.

YEARS OF EXPERIENCE

The Orgoblo has been in the process of development for more than thirty years. It has been gradually improved and perfected until it has reached the advanced stage of construction of the present day . . . an exceedingly quiet running and practically vibrationless blower so designed that an ample supply of wind is assured whatever the demands of the organ.

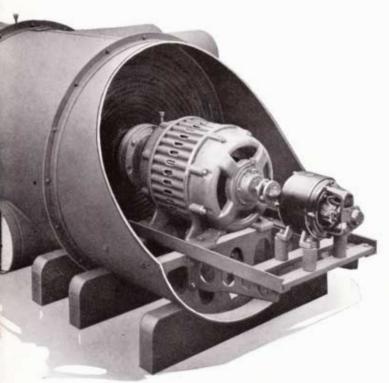
From a glance at the history of the Orgoblo, it will be seen that in the past thirty years the Spencer organ blowers have passed through many stages of development. This includes rotary and reciprocating water motors, electric blowers with: first, wood box construction; second, wood and metal box construction; and now, the cylindrical metal construction, which marks the highest development yet reached in organ blowing apparatus.

The Orgoblo is truly a "Standard of Excellence among Organ Blowers." It is the only blower on the market in which the air has a continuous passage through the machine, thereby avoiding the losses incident to stopping and starting the air between stages; and also it is the only blower in which the loss by fan side leakage has been entirely overcome.

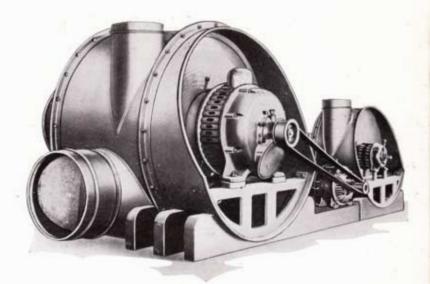
The above characteristics make the Orgoblo most nearly noiseless of any blower made, and at the same time raise the efficiency to such a degree that it is by far the most economical to operate.

SIZES

There is an Orgoblo of the proper size for every organ made. They range in size from the small ½ H. P. units suitable for student Reed Organs to mammoth 75 and 100 H. P. multi-stage, multi-pressure outfits such as may be found on some of the largest organs in the world.



Motor end of 40 H. P. Orgobio installed at Roxy Theatre, New York, N. Y.



40 H. P. Orgoblo with 2 H. P. step-up, Irving Auditorium, University of Pennsylvania

The wide experience of this company in the field of organ blowing, together with the scientific design of the Orgoblo, enables it to readily cope with any organ blowing problem, whatever it may be. The resources and experience of this organization are always at the service of anyone who is interested in this subject.

SPECIAL ORGOBLOS

Years of experience have shown that standard compound Orgoblos meet ninetenths of the organ blowing requirements everywhere.

However, Spencer has also had a very wide experience in handling special installations where the requirements are not covered by standard Orgoblos. Spencer's years of experience in all types of pneumatic engineering work prove exceptionally helpful in designing the proper equipment for any special installation. Therefore, inquiries covering unusual or difficult installations are particularly solicited.

EXTRACTS FROM LETTERS RECEIVED

"We have an instance in this city where one of your machines has been running constantly for 23 years for an average of five days a week, and the repair cost has been nil. (We have had the care and tuning of this organ for twenty-two years and can vouch for the truth of this)."

Yours very truly, N. T. PEARCE Christ Church, N. Z.

"In May, 1919, the Freeport Consistory S.P.R.S dedicated a Wangerin Organ equipped with one of your steel Orgoblos. Today this same company is removing the instrument in preparation of the installation of a new one in our new Consistory Cathedral.

"It may interest you to know that in all this time (12 years), the Orgoblo has not received or required one bit of attention beyond the occasional filling of oil cups. The organ has given service on an average of two hours daily and in some cases as long as twenty hours at one time. On one occasion it ran forty-eight hours without a stop.

"We will surely specify Orgoblos for all of our new equipment."

Very truly yours, Organist of Freeport Consistory

"The ½ H.P. Orgoblo, motor No. 23210, is installed in St. Mary's Anglican Church, Waterloo St., Saint John, New Brunswick, Canada, and, Sirs, I can assure you it is working with great satisfaction in every way. Personally, I cannot speak too highly about it in neatness, workmanship and power, and if you ever have a sale for another machine in this part of the country, I will recommend it very highly."

Yours sincerely, F. F. MEURLING, Saint John, N. B., Canada "For the first time all the notes of our unusually large organ can be let out to the full and flood our big majestic church with delightful harmony. The Orgoblo measured up to every requirement and I have no doubt whatever but that it will continue to do so. Our organist will gladly show anyone in this section who may be interested, the smooth and perfect working of your renowned 'Orgoblo.' This testimonial is voluntary.

"With continued best wishes."

Yours very sincerely,
F. Jos. Magri, Pastor
St. Paul's Catholic Church,
Portsmouth, Va.

"It is a very splendid machine, functions perfectly and delightfully. The compactness, the splendid action, the perfect insulation, the direct flow and ideal cutoff and swift blower action are certainly very excellent. I appreciate the machine and should I again have the problem of installing a motor in an organ I shall surely get into communication with you, for I believe you have the finest and best organ motor proposition on the market."

Truly yours,
H. E. DUTTWEILER, Pastor
Mt. Hope M. E. Church,
Detroit, Mich.

"I should like to say a word about the 'Orgoblo,' you have just installed at the Second Congregational Church this city.

"It has met every demand that I have been able to impose upon it. Continuous playing with full organ causes no more variation in the wind supply than does the softest stop played alone. Needless to say it is most satisfactory and wonderfully quiet."

Very truly yours, ROGER N. DABOLL, Organist New London, Conn. "We beg to acknowledge with thanks your esteemed letters of 15th Feb. and 26th January. The kind attention you continue to give to our orders affords pleasure to ourselves and satisfaction to our clients.

"We are glad to state that the two outfits sent to Cape Town, one to the Catholic Cathedral, and the other to the Wesleyan Metropolitan Church, have given complete satisfaction.

"Ere this is received you will have further orders for Port Elizabeth Catholic Cathedral and Cape Town Lutheran Church. Other orders will, we hope, be settled shortly in our favor.

"Looking back over the five years that have passed since our first order was placed in your hands, we have never had an 'Orgoblo' that failed to answer its purpose and we have always noted with pleasure the care regarding details that is continually evident. We are, dear Sirs,"

Faithfully yours,
W. C. COOPER,
Cooper, Gill & Tomkins,
Cape Town.

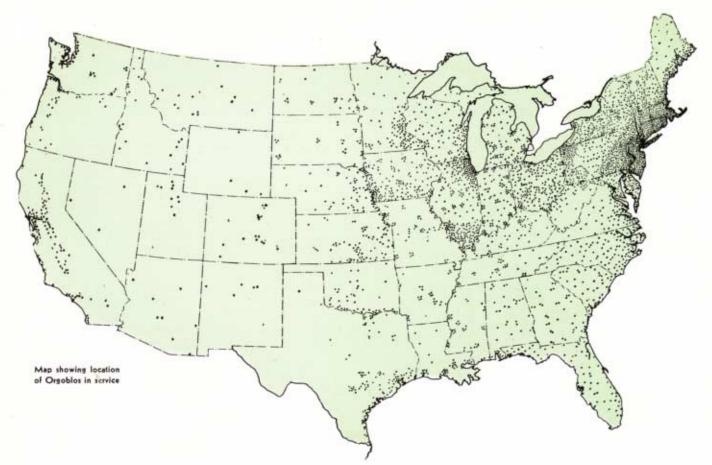
"Please send me a copy of your new catalogue to the above address.

"I have one of your 2 horse-power blowers operating my residence organ. It is surprisingly quiet and otherwise entirely satisfactory."

Yours very truly, HARRY UPSON CAMP, Sales Mgr. The Frazee Organ Co.

"I wish to express my appreciation of your kindness and will at every opportunity remember the Orgoblo as being the best on the market. In all my experience in the organ tuning and repairing business I have never found an Orgoblo that was not satisfactory in every respect. I remain,"

Yours very truly, J. H. L. PARKER, Portland, Ore.



ASK ANY ORGOBLO USER

The letters and list of users on the opposite page speak for themselves. Any one can obtain the facts first hand by visiting a nearby installation. The above map represents some of the places in the United

States where Orgoblos are in use. The list below indicates the number of cities and towns having Orgoblos in each state. Spencer will gladly give you the addresses of several installations in your vicinity.

State	No. of Towns	State	No. of Towns	State	No. of Towns
Alabama	26	Maine	84	Ohio	210
Arizona		Maryland	50	Oklahoma	42
Arkansas		Massachusetts	343	Oregon	25
California	127	Michigan	1.40	Pennsylvania	418
Colorado		Minnesota	107	Rhode Island	45
Connecticut	160	Mississippi	. 30	South Carolina	37
Delaware	15	Missouri	. 75	South Dakota	27
District of Columbia	7	Montana	. 14	Tennessee	34
Florida	100	Nebraska	61	Texas	102
Georgia Idaho	40	Nevada	. 3	Utah	8
YIII:	214	New Jersey	203	Vermont	57
Indiana	***	New Hampshire	. 62	Virginia	59
Iowa	162	New Mexico		Washington	
Kansas	74	New York	548	West Virginia	
Kentucky	2.2	North Carolina	. 84	Wisconsin	145
Louisiana	12	North Dakota	. 22	Wyoming	4

PLEASE SUBMIT THE FOLLOWING INFORMATION TO THE SPENCER TURBINE COMPANY FOR ESTIMATE

1. Where is organ to be installed?	
2. Address	
3. Is organ reed or pipe?Builder's name	
4. No. of speaking stopsNo. of augmented stops	
5. Probable age of organ	
6. Names of stops and couplers	
7. Is action tracker, stack pneumatic, tubular pneumatic or electro pneumatic?	
8. What is wind pressure or pressures in inches of water? (Use a "U" shape glass	
tube wind gauge)	
9. State number of cubic feet of air required per minute (if possible)	
10. Is current D. C. or A. C.?	
11. State the voltage	
12. If alternating current state number of cycles Phase	

ELECTRICAL SERVICE

Nothing saves more trouble, time and expense than thoroughness in obtaining correct data regarding the kind of electric current available for each individual job, also complete information as to any special rules of the power company regarding the type and horse power of motors permissible on their lines in different sections of their systems.

It is absolutely essential to give the power company the following information.

- (A) The horse power of the motor to be installed.
- (B) The location of the installation (street and number of church, theatre, or residence).
- (C) The approximate date that the equipment is to be installed.

Obtain from the power company a written statement as to the current available under the above conditions.

ORGOBLO JUNIOR

PRACTICAL WIND POWER FOR SMALL ORGANS

FOR MANY YEARS there has been a demand for a small organ blower which would be comparatively inexpensive and yet give the student or home player all the advantages that are obtained with mechanical wind power on the larger organs.

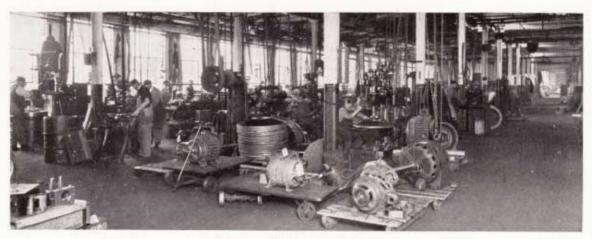
After all, a good organ—no matter how old-deserves good power, and a hard working student or zealous organist in a small church or in the home should not be handicapped by obsolete methods of furnishing power. The Orgoblo Junior has been developed to meet this demand Its design is the result of thirty years experience in manufacturing organ blowers. While low in cost compared to the value of the organ which it serves, the Orgoblo Junior is of the highest quality in every regard and will give service equal to that of the larger sizes which have been used on the great majority of American organs for years.

The need for a good organ blower is manifold. Air is the life of an organ—the supply should be adequate, steady and reliable. The organ blower must last a long term of years and operate without noise to mar the effect of the music. The fans, deflectors, bearings and in fact all parts of the Orgoblo are designed for quiet, efficient and satisfactory service over a long term of years. The design of the passages is such that air passes through without eddys and back currents. This gives smooth power and quiet operation, even with suddenly varying loads.

On small organs the point of efficiency is very important. The Spencer Orgoblo and Orgoblo Junior use very little power. When no notes are being played, the consumption is only just enough to overcome the frictional losses of a running machine, and when the organ is played, this consumption is almost directly in proportion to the amount of air being used.

The Spencer Orgoblo Junior furnishes ample power for very small pipe organs and practically all sizes of reed organs. It is a machine of extreme simplicity, yet so carefully designed and constructed that a smooth, steady, and inexhaustible wind supply is maintained at all times,





One corner of the Spencer Machine Room

SPENCER SERVICE

PENCER SERVICE begins when the purchase of an organ blower is first given consideration. Spencer engineers contribute the knowledge gained in contact with many installations and help in making out specifications when this service is desired. Special requirements are given detailed attention.

Spencer Service also includes the ability to serve promptly. One entire floor is

required for the electric motors that are ready for immediate application. Many other parts are in stock—and since the complete unit is made up in one factory the purchaser is assured

of prompt attention and deliveries.

All Spencer Organ Blowers are given tests in the factory—not only for load, but for noise, vibration and for assurance of satisfactory service over many years.

Spencer Service on repairs is a factor the purchaser can depend upon for the life of the organ blower. Spencer Orgoblos are built to last—every item in the design and manufacture is decided on

the basis of maximum life of the machine under severe conditions, and Spencer regards their permanent satisfactory operation not only as an obligation but a matter of deep interest.



A section of the Spencer Testing Department

Spencer organ power engineers will gladly furnish complete information on any phase of organ power service

An interview can be arranged promptly by writing to the address given below

THE SPENCER TURBINE CO.

Organ Power Division

HARTFORD, CONNECTICUT