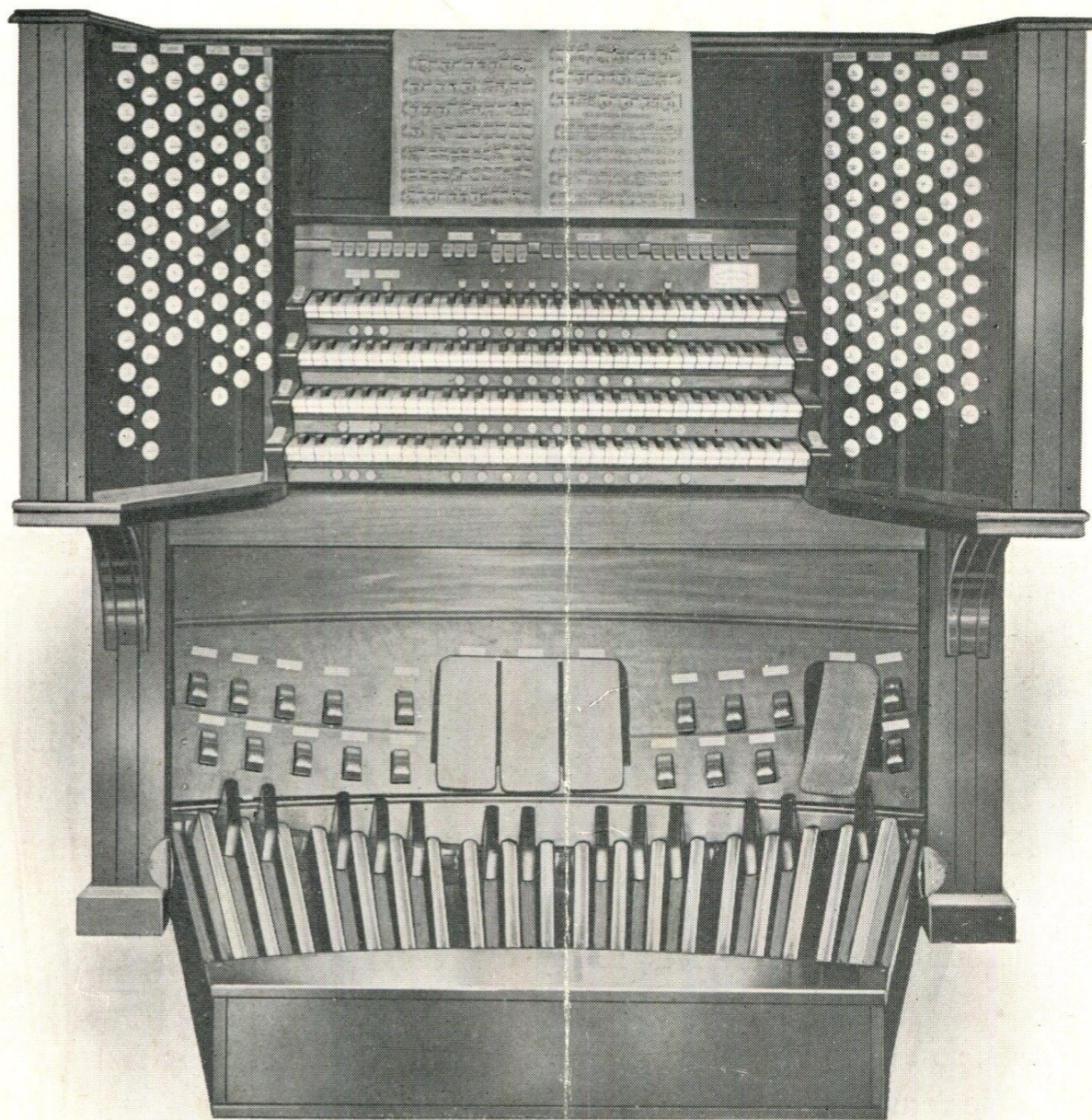


**The Organ**  
FOR  
**The Panama-Pacific Exposition**  
SAN FRANCISCO, CALIFORNIA  
1915



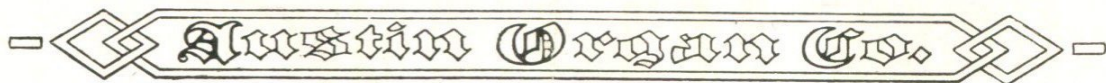
THE FOUR-MANUAL MOVABLE CONSOLE



**AUSTIN ORGAN COMPANY**

HARTFORD, CONN., U. S. A





**THE GREAT ORGAN**  
OF THE  
**PANAMA-PACIFIC EXPOSITION**  
BUILT BY  
**AUSTIN ORGAN COMPANY**  
**HARTFORD, CONN.**

**I**N the Exposition celebrating the wonderful achievement in cutting the Isthmus of Panama and linking the two great oceans of the earth with a navigable canal, it is most fitting that music should be a prominent feature.

And what instrument has such majestic, sublime and diversified qualities as the organ?—the instrument without a peer or parallel.

In the musical plans for this great celebration, a superb organ of rare excellence and magnitude is provided. The instrument is located in a specially constructed chamber, 44 feet 6½ inches wide, 20 feet deep, and 50 feet high, above the stage in the Festival Hall, the Echo organ being in another chamber above the ceiling of the Dome.

It has six distinct parts, viz.: Great organ, Swell organ, Choir organ, Solo organ, Echo organ, and Pedal organ; all these separate organs, so to speak, being operated separately or collectively from a movable four-manual console.

The builders have shown great skill and ingenuity in the mechanism of the console, inasmuch as no air pressure or pneumatic work is required in it, its whole mechanism being electric, and its sole connection to the organ, some parts of which are at least 200 feet away, is a cable composed of hundreds of insulated wires. A most complete system of control has been provided in the adjustable combination pistons and pedals which, at the slightest touch,



## Austin Organ Co.

immediately provide the organist with any combination of stops or tone qualities desired. The builders also have provided their latest improvement in "general combination pistons," eight in number, which can be set to give immediate changes on **all manuals and pedals** simultaneously; thus, at one touch, multitudes of stops instantly move, giving complete changes of tone color and power in all the organs. This is the greatest possible aid to the organist, as his combinations can be all previously arranged and **one motion** will give any change desired.

The exterior arrangement of the stops, couplers and accessories, with their measurements and positions, is in accordance with diagrams planned by Mr. Edwin H. Lemare, the celebrated organist, and the specifications of the organ or its scheme of stops, was designed by the Exposition authorities.

The public will be interested to know that after the Exposition is over, this great organ will be moved to the San Francisco Auditorium, now being built at the new Civic center in this wonderful city. The largest pipe of this organ is the 32 CCCC of the pedal Double Open Diapason. This pipe weighs over 1300 lbs., and is 32 feet in length. Special timber had to be sawed from selected logs to get planks of sufficient length and width for the construction of these pipes. This, however, is only one of the three stops of 32 feet pitch in this instrument, for there is also a 32-foot metal stop and a 32-foot reed. The lower part of the 32-foot metal stop is on the front of the organ, visible to all, the center pipe being CCCC, measuring 41 feet long, 20 inches in diameter, and weighing considerably over 600 lbs. These pipes are made of specially rolled heavy zinc. From these monsters the pipes vary in size down to a fraction of an inch in length and a fraction of an ounce in weight.

The organ, like all other instruments of the Austin make, is built on their Universal Air Chest system, which provides absolutely perfect pressure to all pipes as well as internal accessibility to all



## Austin Organ Co.

the mechanism. The largest chest is 41 feet long, 15 feet wide, and 7 feet high. Special blowing apparatus was designed for this instrument, there being two blowers instead of one, each one of which is capable of furnishing sufficient wind for about two-thirds of the organ. Each of these blowers has a 20-horsepower direct-connected motor, and supplies air at the various pressures required. Two 20-horsepower motors are therefore required to furnish air for the instrument. These blowers were built by the Organ Power Co. of Hartford, Conn. A 9-volt, 40-ampere generator is also provided to furnish the current for the organ action.

To those who are not versed in organ lore, the following items may be of interest:—

There are four Austin Patent-Universal Air Chests which contain the compressed air, and on which stand the pipes. These air chests can be entered by means of air locks, while the wind is on, and in the largest of these air chambers it would be quite possible to seat comfortably at tables and serve a banquet to 75 persons. The organ weighs approximately forty tons. There are about 100 miles of wire used in the electric circuits. Over ten tons of metal is used in the construction, consisting of platinum, silver, brass, copper, lead, tin, zinc, iron, steel, bronze and aluminum. Upward of 30,000 feet of lumber was used, consisting of Ebony, Walnut, Oak, Birch, Maple, Whitewood, Pine, and Cherry. Solid ivory is used for the draw-stop heads and keys.

The building of this gigantic and most important instrument, was intrusted to the Austin Organ Co. after a most thorough investigation of the ability and merits of several of the leading organ manufacturers of the world, their instrument being deemed most satisfactory and suitable for this unparalleled celebration in the history of this country.





## GREAT ORGAN

Compass CC to C4—61 notes.		17	Mixture 4 and 5 ranks.	
1	Double		18	Double Trumpet 16'
	Open Diapason	16'	19	Posaune 8'
2	Bourdon	16'	20	French Trumpet 8'
3	Open Diapason (1 large)	8'	21	Clarion 4'
4	Open Diapason (2 med.)	8'	22	Sesquialtra, 3 ranks
5	Open Diapason (3 small)	8'	23	Cathedral Chimes
6	Viole Gamba	8'		Swell to Great.
7	Dulciana	8'		Swell to Great Sub.
8	Gemshorn	8'		Swell to Great Octave.
9	Stopped Diapason	8'		Choir to Great.
10	Philomela	8'		Choir to Great Sub.
11	Harmonic Flute	8'		Choir to Great Octave.
12	Octave	4'		Solo and Echo to Great.
13	Gambette	4'		Solo and Echo to Great
14	Flute Harmonique	4'		Octave.
15	Twelfth	2 $\frac{2}{3}$ '		Eight adjustable composition
16	Fifteenth	2'		pistons to control Great stops.

## SWELL ORGAN

1	Bourdon	16'	17	Mixture, 4 and 5 ranks.	
2	Double Dulciana	16'	18	Contra Posaune	16'
3	Open Diapason (large)	8'	19	Contra Fagotto	16'
4	Open Diapason (small)	8'	20	Cornopean	8'
5	Viole d'Orchestre	8'	21	Oboe	8'
6	Salicional	8'	22	Harmonic Trumpet	8'
7	Aeoline	8'	23	Clarion	4'
8	Voix Celeste	8'	24	Vox Humana	8'
9	Clarabella	8'	25	Unda Maris	8'
10	Spitzfloete	8'		Tremulant.	
11	Lieblich Gedeckt	8'		Swell Sub.	
12	Principal	4'		Swell Unison off.	
13	Violina	4'		Swell Octave.	
14	Flute Harmonique	4'		Solo and Echo to Swell.	
15	Wald Floete	4'		Eight adjustable composition	
16	Piccolo Harmonique	2'		pistons to control Swell stops.	





### CHOIR ORGAN

1	Contra Gamba	16'	17	Cor Anglais	8'
2	Open Diapason	8'	18	Celesta.	
3	Gamba	8'		Tremulant.	
4	Concert Flute	8'		Choir Sub.	
5	Hohl Flute	8'		Choir Unison off.	
6	Flauto Dolce	8'		Choir Octave.	
7	Quintadena	8'		Swell to Choir.	
8	Dulciana	8'		Swell to Choir Sub.	
9	Flute Celeste	8'		Swell to Choir Octave.	
10	Octave	4'		Solo and Echo to Choir.	
11	Flute Harmonique	4'		Solo and Echo to Choir Sub.	
12	Suabe Flute	4'		Solo and Echo to Choir	
13	Harmonic Piccolo	2'		Octave.	
14	Dolce Cornet (3 ranks).			Eight adjustable composition	
15	Harmonic Trumpet	8'		pistons to control Choir stops.	
16	Clarionet	8'			

Echo organ also playable on choir manual by duplex action.

### SOLO ORGAN

1	Tuba Magna	8'	9	Dolce	8'
2	Tuba Marabilis	8'	10	French Horn	8'
3	Tuba Clarion	4'	11	Orchestral Oboe	8'
4	Viole d'Orchestre	8'	12	Corno di Bassetto	8'
5	Viole Celeste	8'	13	Vox Humana	8'
6	Concert Flute	8'	14	Harmonic Trumpet	8'
7	Harmonic Flute	4'	15	Flugel Horn	8'
8	Harmonic Piccolo	2'		Tremulant.	

### ECHO ORGAN

1	Lieblich Bourdon	16'		Solo and Echo Sub.	
2	Small Diapason	8'		Solo and Echo Unison off.	
3	Gamba	8'		Solo and Echo Octave.	
4	Dolce	8'		Great to Solo and Echo.	
5	Cor de Nuit	8'		Solo "on," Echo "off."	
6	Chimney Flute	8'		Echo "on," Solo "off."	
7	Unda Maris	8'		Solo and Echo "on."	
8	Flauto Dolce	4'		Choir "on," Echo "off."	





### ECHO ORGAN—Continued

9	Vox Humana	8'	Echo "on," Choir "off."
10	Cathedral Chimes.		Choir and Echo "on."
	Tremulant.		Eight adjustable composition
	Echo organ stops are playable		pistons to control Solo and Echo
	also from Choir manual by		Stops.
	duplex action.		

### PEDAL ORGAN

1	Gravissima, resultant	64'	Swell to Pedal Octave.
2	Double Open Diapason	32'	Choir to Pedal.
3	Contra Violone	32'	Solo and Echo to Pedal.
4	Open Diapason	16'	Solo and Echo to Pedal
5	Open Diapason	16'	Octave.
6	Open Diapason	16'	Pedal Super Octave.
7	Violone	16'	Choir to Pedal Octave.
8	Dulciana	16'	The organ is voiced on 5-10-15
9	Bourdon	16'	and 25 inches wind pressures.
10	Lieblich Bourdon	16'	Six adjustable composition
11	Gross Quint	10 $\frac{2}{3}$ '	pedals to control Pedal organ.
12	Flauto Dolce	8'	Eight composition pedals
13	Gross Flute	8'	duplicating the eight general
14	Octave Dulciana	8'	pistons over upper manual.
15	Violoncello	8'	Four zero pistons affecting
16	Octave Flute	4'	Swell, Choir, Great and Solo.
17	Contra Bombarde	32'	Eight general pistons over
18	Trombone	16'	upper manual affecting the
19	Tuba	16'	entire organ including couplers,
20	Octave Trombone	8'	Adjustable.
21	Clarion	4'	One zero piston over upper
22	Posaune	16'	manual affecting the entire
	Great to Pedal.		organ.
	Swell to Pedal.		

### ACCESSORY

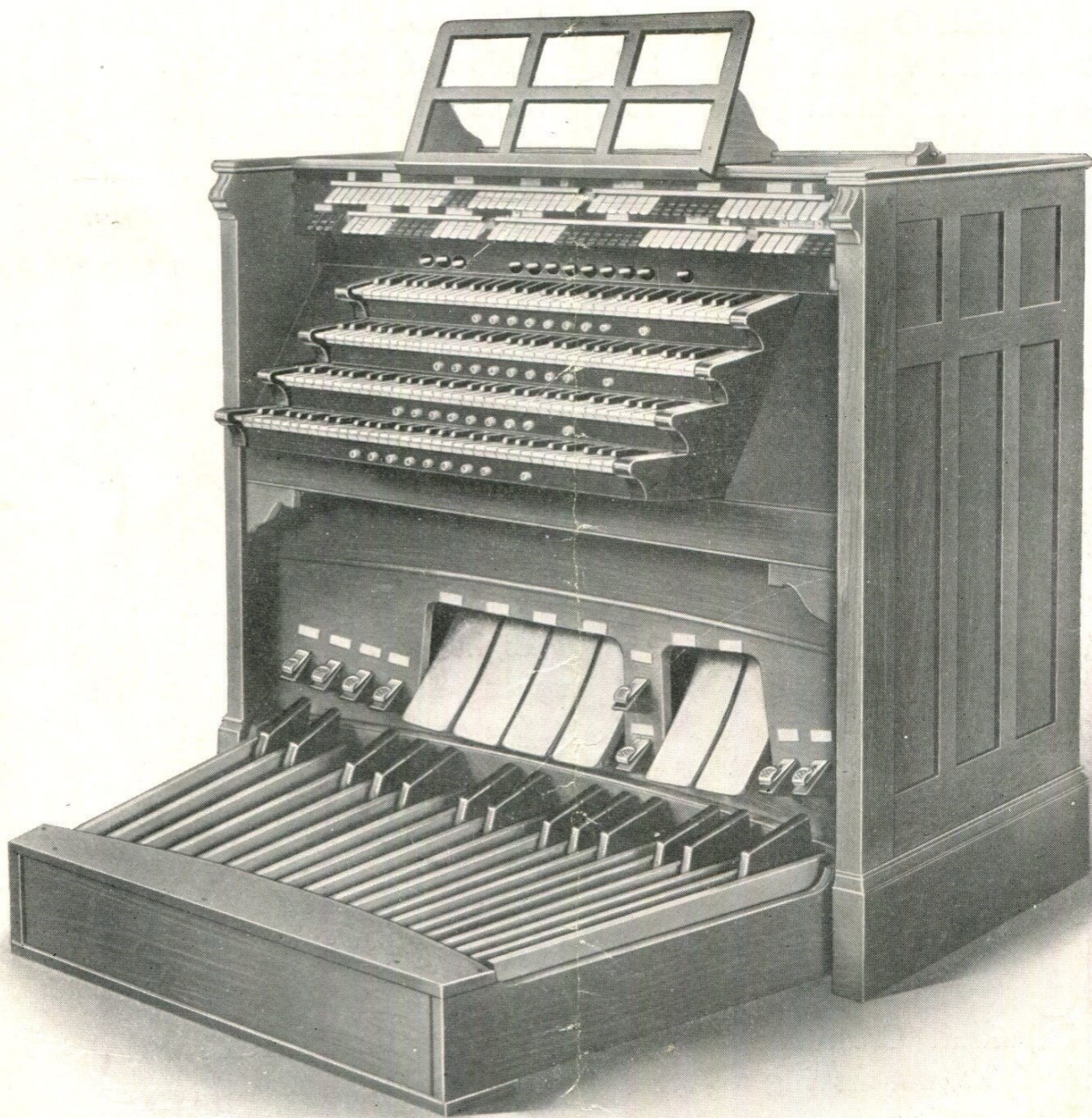
Balanced Crescendo Pedal,	Great to Pedal, reversible.
adjustable, not moving registers.	Solo to Pedal, reversible.
Balanced Swell Pedal.	Solo to Great, reversible.
Balanced Choir Pedal.	Sforzando Pedal.
Balanced Solo and Echo Pedal.	



## ACCESSORY—Continued

The couplers of the organ are duplicated by tablets over the upper manual. Two pistons are provided over the upper manual, bringing into operation either the knob couplers or the tablet couplers. The couplers are adjustable on the knobs only. The couplers are controlled by the "general" pistons only. The Great organ pistons are arranged to operate the six pedal combinations at will, two pistons being provided for this purpose.

All Composition pistons and pedals are adjusted or set by moving the registers to the desired combination, *while the piston is held in*, or the pedal *held down*.



AUSTIN STOP-KEY CONSOLE (OPEN TYPE)  
USUALLY FURNISHED WITH ROLL TOP