

ST KILIAN'S ROMAN CATHOLIC CHURCH, BENDIGO

Detailed documentation of pipe organ built by

AUGUST RANDEBROCK ORGELBAUMEISTER IN PADERBORN 1871

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Introduction

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Note: after the preparation of this documentation, the original wind system was removed from the organ and burnt. The gallery was dismantled and the organ moved to floor-level. [This photograph](#) records the situation around 1985.

1. THE BUILDING

Address: Corner of McCrae and Chapel Streets,
 Bendigo,
 Victoria

Historical details:

Church built in 1888; [\[11\]](#) architect, W. C. Vahland. [\[21\]](#)

Size: Length of nave: 31 m

Width of nave: 16 m

Width of chancel: 9 m

Depth of chancel: 5 m

Width of west-end gallery: 9 m

Depth of west-end gallery: 7 m

Ground plan of building [Fig. 1](#)

General contents

Carpet covers the entire nave except for the area occupied by the three sets of pews.

Acoustics

The chord shown in [Fig. 2](#) was played, held for 5 seconds, and then released.

The time taken for the sound to become inaudible after release of the chord was recorded, as heard from the console, and was found to be approximately 3/4 second with the following registration.

Hauptwerk: 16 Fuss Bourdon, 8 Fuss Principal, 4 Fuss Principal,
2-2/3 Fuss Quinte, 2 Fuss Octav, 3 fach Mixtur

Pedal: 16 Fuss Subbass, 16 Fuss Violonbass, 8 Fuss Principal-
bass, 8 Fuss Gedacktbass, 16 Fuss Posaune, Pedal.Coppel

Ventilation

This wooden building has sash windows.

Position of the organ

The organ is situated non-centrally in the west-end gallery as shown in [Fig. 1](#). It has occupied this position since its installation in the present building.

Climatic conditions and heating

The organ has suffered very badly from extremes of temperature in the wooden building. Judging from the condition of the casework, it is remarkable that the organ has survived the summer heat to the extent that it has been possible to renovate it to a playable condition.

2. THE ORGAN

General condition

Pipework

This has been badly battered in the past, and all open metal pipes have been tongued at same stage. Tuning slides have now been added to all open metal pipes of the Hauptwerk.

Numerous pipes are still missing, particularly from the smallest pipes of each rank.

Action

The key action is rather noisy, which is only to be expected from an instrument of this age - and past history. The Pedal key action has a tendency to cypher very easily.

Soundboards

These are in amazingly good condition, and no murmurs are present. There are, however, a few minor "rumings" and the pallet chest covers do not seal perfectly.

Bellows

Apart from a few leaks, the bellows is in satisfactory condition.

Console

The external woodwork finish is very badly blistered, and some wood is missing from the music desk assembly.

Case

It is in this section of the organ where past severe climatic conditions are evident. The woodwork varnish is blistered, the paint is faded, and several large cracks are present. In general, the casework is now in a very fragile state. Dust is present on the casework in enormous quantities

Current maintenance

Major tuning and maintenance is carried out by Mr John Parker.

3. HISTORY

1871 organ built by August Randebrock, organbuilder of Paderborn.

[Plate 1](#)

1872 organ installed in the west-end gallery of the original St Kilian's 'S Church, Bendigo, by George Fincham. Opened on 11th December, 1872 by H. F. Towle. [\[3\]](#)

1887 Church declared unsafe and a temporary wooden church built, opened 1st July, 1888. Organ moved into new church by George Fincham. [\[4\]](#)

1896 Some new pipes supplied by George Fincham. [\[5\]](#)

1971 Renovation work commenced on the organ through the efforts of Fr J. P. Stockdale and Mr R. A. Anderson.

The missing 4 fach Cornett on the Hauptwerk was replaced with new pipes.

1979 The two missing reed ranks (Hauptwerk 8 Fuss Trompete and Pedal 16 Fuss Posaune) were replaced with new pipes.

Renovation work is still in progress.

Between 1896 and 1971, the organ suffered from continued vandalism. Numerous pipes were stolen from the organ, and it seems as if three attempts have been woe in the past to complete the ranks of pipes from which pipework has disappeared. It is not known when the three sets of pipes mentioned above were removed. Only one original pipe remains from the Hauptwerk 4 fach Cornett.

4. DEGREE OF ORIGINALITY

a. Pipework

Prior to 1971, the Hauptwerk 4 fach Cornett, 8 Fuss Trompete, and Pedal 16 Fuss Posaune were entirely missing. These have since been replaced by new pipework manufactured by Hill, Norman add Beard. Most of the other original pipework is present, although tuning slides have been added to all open metal pipes on the Hauptwerk.

b. Soundboards

These are completely original.

c. Action

All action is completely original.

d. wind supply

The hand-blowing apparatus is mostly intact, but is disconnected. The bellows feeders have been clamped shut.

e. Console

This is completely original.

f. Case

This is also completely original, although it has been damaged by excessive summer heat.

Former Swell box

There is documentary evidence within the organ to suggest that the Unterwerk was originally enclosed in a Swell box. Two labelled relics of the mechanism associated with the Swell are shown in Plates 2 and 3. The inscription on Plate 3 suggests that the Swell shutters were situated on top of the box. There is also a slot to the right of the pedal-board for the former hitch-down pedal. Plate 42 The Swell box and most of its mechanism have been removed from the organ at some stage. It is possible that the Swell box was never installed.

HISTORIC SIGNIFICANCE

The organ in St Kilian's, Bendigo, is the only large nineteenth century German organ in Australia. As such, it is a unique example of a major school of organbuilding and forms an important link with German Romantic organbuilding and organ music.

Due to the effects of wars and the continual striving towards "modernisation" and "improvement", such instruments have become extremely rare in Germany. The fact that this organ deviates but slightly from its original form makes it an instrument of international historic importance.

Its conservative tonal design exhibits close relationships to earlier schools of organbuilding in Germany. The case of the St Kilian's organ is outstanding for its ornate carving, particularly beneath the central flat of pipes and in the upper portions of the casework. The fact that it still possesses its original tin display pipes is probably unique, since most organs in Germany

had their tin display pipes removed in World War I to supply metal to the war industry.

Consequently the preservation of this outstanding organ is most important. Due to the severe climatic conditions which it has suffered at St Kilian' s (a wooden church), it would be wise to move this organ into the Sacred Heart Roman Catholic Cathedral, Bendigo, where its continued preservation would be more assured. It could do service there as a choir organ in one of the transepts.

5. PIPEWORK

6. ACTION

Key action

All key action is mechanical.

The Hauptwerk has a "suspended" key action, and consists of one set of squares and horizontal rollers.

The Unterwerk and Pedal key actions are similar W that of the Great except that the actionis transferred downwards.

The coupling action is mechanical, and the Manual.Coppel has its own set of backfalls The Pedal. Coppel (Hauptwerk to Pedal) operates by means of a set of one-armed levers. The Pedal. Octav Coppel has its own set of squares.

Sketch of key action [Fig. 6](#)

View of key action from the console [Plate 22](#)

Rollers of Hauptwerk key action [Plate 23](#)

Squares of Unterwerk key action [Plate 24](#)

Pedal key action and Pedal. Octav Coppel [Plate 25](#)

Materials of key action: Wood

Stop action

The stop action is also mechanical.

The Hauptwerk stop action functions by means of levers which transfer the motion from the stopknob trace rods upwards to the sliders. The top ends of these levers directly engage the sliders between the C- and C#-soundboards of the Hauptwerk. The Unterwerk stop action operates in a similar manner, except that the action is displaced downwards to the treble end of the chromatic soundboard.

The Pedal stop action is somewhat more complex, and wooden trundles are used to turn the action through 90 degrees.

Trundle of Pedal stop action Plate 26

7. SOUNDBOARDS

Wind pressure: 61 mm (2-3/8 inches), measured at C Unterwerk 2 Fuss Flageolet.

All pipework stands on soundboards (that is, no wind chests present).

Details of soundboards

	Hauptwerk	Unterwerk	Pedal
Distance from floor to bottom of pallet chest	2.74 m	49 cm	1.76 m
Total width	1.66 m (x2)	2.45 m	1.73 m (x2)
Total depth	1.18 m	1.0 m	95 cm
Depth of pallet chest	450 mm	365 m	355 mm
Height of pallet chest	128 mm	120 mm	140 mm

Height of note channels	75 mm	75 mm	60 mm
Thickness of sliders	8 mm	8 mm	8 mm
Thickness of upper board	45 mm	47 mm	45 mm
Height of rack board	114 mm	115 mm	None
Form of pallets	C - B: Split c0 - f3: Simple	Simple	Simple

These Soundboards have no bottom board (table).

The Hauptwerk and Pedal divisions are each divided into C- and C#- soundboards. There is a distance of 495 mm between the C- and C#-soundboards of the Hauptwerk. The corresponding distance between the Pedal C- and C#-soundboards is 400 mm.

The upper boards occur in blocks for each set of pipes.

Pallets of Hauptwerk soundboard [Plate 27](#)

Plan view of soundboard placement Fig. 7

Order of channels

Hauptwerk: Symmetrical, large in centre, divided

Unterwerk: Chromatic

Pedal: Symmetrical, large in centre, divided

Order of ranks (from the front of each soundboard)

Hauptwerk	Unterwerk	Pedal
1. 4 fach Cornett	1. 8 Fuss Geigen. Principal	1.16 Fuss Posaune
2. 8 Fuss Principal	2. 8 Fuss Portunal	2. 8 Fuss Gedacktbass
3. 16 Fuss Bourdon	3. 8 Fuss Liebl. Gedackt	3. 8 Fuss Principalbass
4. 8 Fuss Hohlflöte	4. 8 Fuss Salicional	4. 16 Fuss Subbass
5. 8 Fuss Gedackt	5. 8 Fuss Fernflöte	5. 16 fuss Violonbass
6. 8 Fuss Gamba	6. 4 Fuss Querflöte	

7. 4 Fuss Principal 7. 4 Fuss Octav
 8. 4 Fuss Gedacktflöte 8. 2 Fuss Flageolet
 9. 2-2/3 Fuss Quinte
 10. 2 Fuss Octav
 11. 3 fach Mixtur
 12. 8 Fuss Trompete

Measurements of slider widths (Rank designations as above. All in m)

	Hauptwerk	Unterwerk	Pedal
Bearer	42	45	48
Rank 1	51	62	58
Bearer	43	60	110
Rank 2	56	59	50
Bearer	50	66	130
Rank 3	57	62	42
Bearer	50	60	180
Rank 4	56	58	50
Bearer	60	50	185
Rank 5	46	41	55
Bearer	41	32	50
Rank 6	45	59	
Bearer	60	160	
Rank 7	50	58	
Bearer	38	40	
Rank 8	47	46	
Bearer	35	35	
Rank 9	44		
Bearer	30		
Rank 10	35		
Bearer	33		
Rank 11	55		
Bearer	45		

Rank 12	51
Bearer	42

8. WIND SUPPLY

One double-rise bellows, 3 m wide x 1.51 m deep, with feeders, situated under the Pedal soundboards, The folds of the bellows both fold inwards.

[Plate 28](#)

The **bellows weights** are rocks and bricks which bear no significant inscriptions.

Concussion bellows for the Hauptwerk, 75 cm x 49 cm. The Unterwerk and Pedal departments have no separate concussion bellows but the Hauptwerk concussion bellows is also partially effective on the Unterwerk. Plate 29

Wind trunk measurements

	External dimensions	Thickness of timber	Total length
To Hauptwerk	26.5 cm x 26.5 cm	14 mm	
Branch to Unterwerk	21.7 cm x 16.0 cm	20 mm	2.42 m

The wind trunk to the Pedal department branches off from the main Hauptwerk wind trunk. The same also occurs for the Unterwerk, and this can be seen in Plate 29.

There is no Tremulant on this organ.

Hand-blowing apparatus

The blowing handle still exists, but it is not in position. The bellows feeders are still attached, but are clamped shut. The blower's telltale is no longer present.

Type of safety valve: Pull-up

9. CONSOLE

General view of console [Plate 30](#)

The console is situated on the left side of the organ case.

Stopknobs

Order of stopknobs on l.h. jamb	Plate 31
Order of stopknobs on overhead jamb (l.h.s.)	Plate 32
Order of stopknobs on overhead jamb (r.h.s.)	Plate 33
Order of stopknobs on r.h. jamb	Plate 34

Material of stop heads: Ebony

Material of stop labels: Porcelain

Diameter of face: 38 - 40 mm

Vertical distance between

between stopknobs:	l.h.s.	centre	r.h.s
	22-22.5 mm	78 mm	120-125 mm

Horizontal distance

between stopknobs:	-	100-105 mm	-
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Length of head: 62 mm

Length of draw: ~60 mm (Manual. Coppel ~40 mm)

Cross-section of shank: 22 m wide x 25 m high

Shape of stop head Fig. 8 and [Plate 35](#)

Style of lettering on stop labels Plates 36, 37

Keyboards

Two manual keyboards of compass C - f3 (54 notes)

Covering of naturals: Ivory

Material of sharps: Ebony

Length of one octave: 166 mm

Length of 3 octaves 498 mm

Depth of touch Man. I 16 mm

Man II 11 mm

Horizontal distance between Manuals I & II: 140 mm

(NB manuals do not overhang)

Vertical distance between Manuals I & II: 68 mm

Distance from Manual I to pedal-board: 707 mm

Sketch of key profiles Fig. 9

Keyboard cheeks [Plate 38](#)

Pedalboard of compass C - c1 (25 notes)

A#-centred, concave and radiating slightly outwards.

Degree of concavity: c0 is 45 mm lower than extremities.

Total length of naturals: 470 mm

Length of sharps: 145 mm

Overhead view of pedalboard [Plate 39](#)

Side view of pedal-board Plate 40

The **music-desk assembly** has two brass clips, and can be lifted out to expose the Hauptwerk key action.

The **nameplate of the builder** consists of a carved wooden angel bearing the inscription "Paderborn/R. Randebrook (sic)/1871." This is situated beneath the central flat of display pipes. Plate 41

The **Swell-shutter control** was a hitch-down pedal which is no longer present.

Plate 42

The pulley of the console telltale is all that remains of this telltale.

Plate 43

Organ bench Plate 44

10. CASE

General view of the case [Plate 45](#)

The display pipes are arranged into seven flats and two outer towers in the following groups.

		11 (upper level)		11 (upper level)			
10	7	11	9	11	7	10	

These 87 pipes are made of tin and are not decorated.

Shape of display pipemouths [Plate 46](#)

Only the central flat of 9 pipes are speaking pipes, and are C - G# of the Hauptwerk B Fuss Principal.

order of display pipes Fig. 10

width of case: 4.2 m (plus 58 m for organ bench)

Depth of case: 4.2 m

Height of case: Almost 5 m

Material of casework: Oak, stained and varnished, edges painted in gold, blue, green or red.

Casework carving under central flat Plate 47

Casework carving on l.h.s. front case Plate 48

Casework carving under r.hs. tower Plate 49

moulding profile 18 m below tower impost Fig. 11

Missing parts: Panel from l.h.s. of case

Panel above console

Panel behind Hauptwerk soundboards

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