

Introduction:

In response to an email request for information on a “Mudgee hay baler” from Sherry Morris of the Museum of the Riverina, I conducted an interview with one of the members of the Mudgee Historical Society who had actually used one of the many different versions of the Mudgee hay baler, or as it was called locally the Mudgee “lucerne press”. It is believed, although not verified, that a local had come up with the design which was then produced commercially. The alleged person’s identity is not known.

The Mudgee Historical Society had two lucerne presses in various states of disrepair which for many years had stood outside and were gradually deteriorating. With shed space becoming available, it was decided to cannibalise the two machines and create one complete press. The timbers had to be replaced but suitable second hand timber was used. In order to fit the restored machine under cover, the press chamber was, however, shortened by some 6 ins (15 cms).

I had watched the restoration project progress and was interested in how the press worked, so recording its operations has also been beneficial to our society. Thanks to Brian Marchant for his patience and co-operation in explaining the mechanism of this ingenious machine.

John Broadley

President

Mudgee Historical Society Inc

INTERVIEW WITH BRIAN MARCHANT

Tuesday, 28th January 2008



Fig. 1 Brian Marchant (John Broadley)

Member Brian Marchant is one of some twenty men who attend the weekly working bees on Tuesday mornings at the Colonial Inn Museum, headquarters of the Mudgee Historical Society Inc. This group is comprised of practical retired tradesmen – plumbers, builders, electricians, shearers, mechanics, farmers – who are involved in maintenance and various conservation projects on site. This unofficial “men’s shed” has evolved of its own accord over time and is continuing to attract new recruits.

Brian is seventy-one years old, was born in Mudgee, and grew up on a property called Wattle Farm, some ten minutes to the north-west of Mudgee on the Hargraves-Hill End Road. During his childhood Wattle Farm was a mixed farm of 496 acres which carried sheep, beef and dairy cattle and produced lucerne and oaten hay. Wattle Farm, now much reduced, remains in Brian's family, while dairying has completely disappeared from the district.

Brian's father owned a lucerne press which was slightly different to the Museum's press - there were apparently several different versions, and there were many once operative in this district alone. When in use, the wheels - two small front wheels and two larger rear wheels - were removed and the press rested on bearers. Earth underneath the pulley wheels would often have to be excavated to allow the pulley wheels to rotate. The cut lucerne, or oaten hay, was brought in from the paddocks and always baled in the one spot. The Museum press, depicted in this document, retains its wheels.

NB. Orientation: Section with large wheel is the rear; ladder is at the front

Step 1:

The front stays were removed and the front plate was folded down to allow for filling with a pitchfork. Timber battens placed at the bottom of the bale enabled three strands of wire to be fed through to tie the bales together later, while three battens were also placed on the top to keep the bale firm; battens were eventually dispensed with. A small leather pouch at the

bottom of the front cross section was used to store a pair of pliers for tying – the Museum’s press retains its pouch.

Once the chamber was about two-thirds full, the front plate was folded back into position and the stays were re-installed. The ladder was then put in place to allow access for additional lucerne/oats to be added to the top of the baling chamber. It was always the practice to put a good sheaf at the top and the bottom of the bale to present it well (ie tart it up!). When compressed, the bale would reduce to about one third of the height of the chamber.

Once the chamber was full and ready for pressing, then a heavy timber pressing plate, which rested on a ledge at the top of the exterior of the chamber at the rear, was swung over to the top of the chamber and lowered. The pressing plate was then affixed via a heavy anchor-like attachment, with a small pulley wheel at both ends, to the bottom pulleys on the sides of the press. **Fig. 7** and **Fig. 8** show a pole at the top which was manoeuvred by a rope to raise and lower the pressing plate. The Mudgee Historical Society’s press does not feature this pole, due to limited height restrictions in the skillion shed where it is currently stored; this will ultimately be re-installed.

The bottom pulleys were in turn linked to additional upper pulleys connected to an axle which turned the large pulley wheel. The latter was in turn attached to a horse, although some presses were occasionally operated by hand, a process which was extremely laborious. **Fig. 8** features a model with a handle for manual pressing which was attached to one of the upper pulleys with a ratchet.

Step 2:

A horse wearing a light harness was then hooked up to the large pulley wheel with a steel eyelet attached to the harness under the rump. The ideal press horse was a solid and strong draught horse which was accustomed to the procedure – the horse was usually a quick learner and could be trained to respond to instructions. Ratchets on either side of the large pulley wheel would drop down until the bale was fully compressed, although the horse used to know the precise distance to travel before stopping.

Step 3:

When the bale was compressed, the wires were tied. The steel pulley ropes were unhooked, and the pressing plate was raised and swung over to the rear. The ends of the bales were trimmed with a broad blade on a long handle.

Step 4:

The front stays were removed, the front plate was folded down, and the bale was pushed out.

To enhance sale, the bale was stacked immediately and placed in shade or covered over in order to stop it from fading.

Lucerne has a higher protein content and was therefore more commonly used for bloodstock. Lucerne was generally dressed up, with all four corners chamfered. Chaff could be made from lucerne or oaten hay.

The above process was repeated for each bale. In an 8-hour day, two men could produce 40 - 45 bales, although for a bet Brian and a mate once produced 65 bales in a day.

Brian would have to catch the horse first in order to start at 7.30am, work until morning tea, then have a lunch break. He started using these machines at the age of about ten (child labour!) and also worked them on other farms in the district. These manual presses/balers went out of use in the 1960s when they were supplanted by mechanical balers. Brian subsequently became a shearer, but is now retired.



Fig. 2



Fig. 3



Fig. 4

Fig. 2 Front view (John Broadley)

Fig. 3 Front view, with ladder (John Broadley)

Fig. 4 Rear view (John Broadley)



Fig. 5



Fig. 6

Fig. 5 Side view (John Broadley)

Fig. 6 Side view, with ladder (John Broadley)

THE CLYDE ENGINEERING COMPANY, LTD., GRANVILLE AND SYDNEY. 29

THE CLYDE "A4" POWER HAY PRESS

FOR LUCERNE, WHEATEN, AND OATEN HAY.

LUCERNE GROWERS! NOTICE THE "A4'S" SIMPLICITY, ITS ECONOMY OF LABOR.
Exerts twice the Pressure of any other of its class.

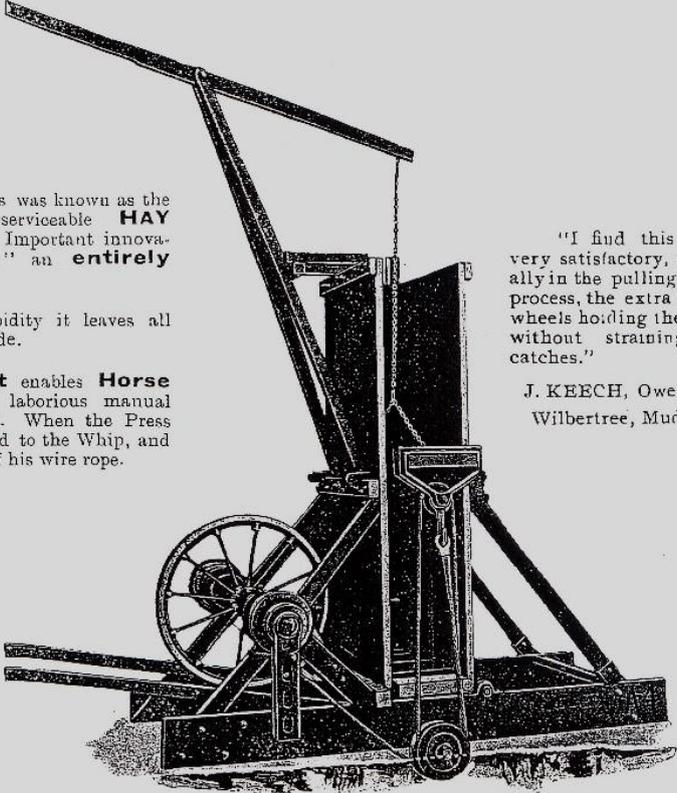
The forerunner of this Press was known as the most manageable and serviceable **HAY PRESS** on the Market. Important innovations constitute the "A4" an **entirely new design**.

For convenience and rapidity it leaves all previous Presses in the shade.

A Whip Attachment enables **Horse Power** to displace the laborious manual exertions formerly required. When the Press is filled a Horse is attached to the Whip, and walks away to the length of his wire rope.

"I find this Press very satisfactory, especially in the pulling down process, the extra pulley wheels holding the ropes without straining the catches."

J. KEECH, Owenella,
Wilbertree, Mudgee.



A COMPARISON.

"A1" PRESS.	"A4" PRESS.
TWO competent Men.	TWO Men, ONE Horse.
Daily Output, 35 Bales.	Daily Output, 50 Bales.
Very fair achievement.	With ease and pleasure.
Framing of well-seasoned Hardwood, strongly constructed, securely braced.	
Wearing Parts of Woodwork shed with Iron.	
Mounted on strong C.I. Wheels. Shafts and necessary Irons for Transport.	
Two Retaining Ratchets —one each side of Press.	
Height of Sides. 7ft. 6in.	Bale Measures. 4ft. 6in. x 2ft. 6in. x 1ft. 6in.
	Bale Weights. 2 to 3 cwt.
	Press Weights. 20 cwt.

MR. J. E. BYRNES, Broombee, says :—
"No trouble for two men with A4 to turn out 40 bales in 8 hours, and no labour for the horses."

Fig. 7 Unknown catalog in the collection of the Mudgee Historical Society Inc

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"EVERYTHING FOR THE



MAN ON THE LAND."

Buzacott-Wolseley

BW-22 HAY-BALING PRESS

(Made in N.S.W.)

**Fast
Simple
Strong
Powerful
Easy**

Sides: 7'6" high.

Bale: 4'6" x 2'6" x 1'6".

Bale Weight: 2 to 3 cwt.



This press is horse-operated by means of whip attachment giving tremendous leverage, and doing away with hard manual work. After press is filled, the horse is hooked on and completes the pressing by walking away to the length of wire rope provided.

Retaining ratchets are fitted to each side of

press. All necessary ropes and levers are supplied.

Constructed entirely from well-seasoned hardwood, braced, and with all wearing parts iron shod. Supplied on transport with stout iron wheels, shafts and irons—as illustrated—or without transport, if desired.

Fig. 8 Unknown catalog in the collection of the Mudgee Historical Society Inc