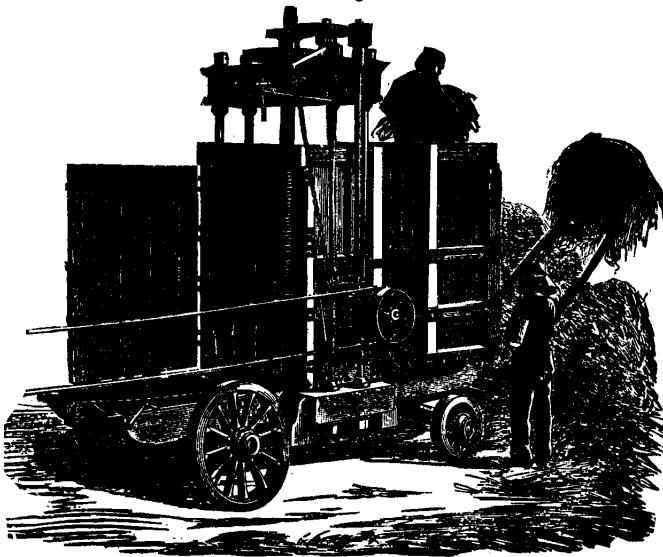


**Baling Press.** Two continuous baling presses took high honors in Paris in 1878, — those of Dedrick and Dodge.

The former has a plunger or piston in connection with a reciprocating feeder, which drives a bunch of hay within the range of the plunger before each stroke of the latter. A certain quantity being thus compressed into a compartment at the end of the chamber, is tied with wire and dropped from the machine.

In the Dodge machine the hay is thrown loosely on the feed-table or troughs in front of the press, whence iron teeth carry it right into the open mouth of the machine, when it is seized by the revolving cones in the head-piece and drawn in from the feed-table in two continuous streams, and built up into a bale 26" in diameter. The diameter of the bale is never increased, but the bale grows longer as layer after layer is built up. In doing this the density of the bale is regulated by the friction-clutch, which has been previously made tight. After the bale is built such length

Fig. 183.



Mabille Frères' Hay Press.

as desired, the action of the compress-screw is brought into play by simply shifting one cog-wheel, and in a few seconds

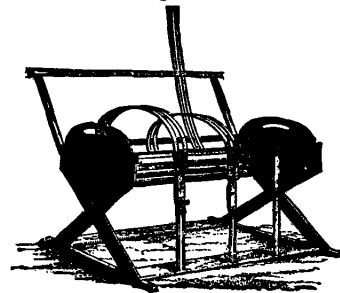
the bale is compressed endwise and shortened about one-fourth or one-fifth its length without increasing its diameter. While the compression is going on, the man attending the press is passing around and fastening the two wires. When this is done, the pressure is released, the bale dropped out, and the press set for another bale.

Fig. 183 represents a baling press, made by Mabille Frères of Amboise, and worked by horse-power. The rotation of the band-wheel is transferred by bevel gearing to the vertical shaft, and that by spur pinion to the system of gearing on top of the machine, which is of different speeds and powers for rapid work at the first of the pressing, followed by slower and more powerful condensation as the truss approaches its final dimensions.

A multitude of small baling presses are used in France, both for packing rations for cavalry and for stowing away in convenient form for handling, the straw or hay of a farm.

One of the smaller kind is that made by Guitton of Corbell, France. It has three pliable steel bands, which are

Fig. 184.



Guitton's Ration Press.

laid back against the bar (one is shown in this position) while the crate is being filled. The bands are then laid over, the ends brought down in front, and secured to hooks. These are forcibly drawn down by pressing the foot on the treadle, each band being in turn attached, a catch holding each firmly until the encircling cord is placed and tied. Each steel band being then released, the bundle is thrown out.

The machines make bundles from 30" to 40" long. A larger size, made on the same principle, but mounted on wheels, makes bundles of from 60 to 80 lbs. weight.

See baling presses, etc. :—

- Ertel . . . . . \* "Min. and Sc. Press," xxxvii. 25.
- Albaret . . . . . \* "Scientific American Sup.," 1949.
- Bale Tie, Hayden . . . . . \* "Scientific American," xxxv. 810.
- Rodecker . . . . . \* "Sc. American," xxxviii. 229.
- Hoop Tightener.
  - Knowles . . . . . \* "Scientific American," xxxv. 274.
- Bale-wire Ends, Securing.
  - Smith . . . . . \* "Scientific American," xxxv. 66.
- Trussing, Gylhem, \* Knight's Report.
  - Paris Exposition Report," v. 236.
- Ration, Guitton . . . . . Ibid., v. 237.