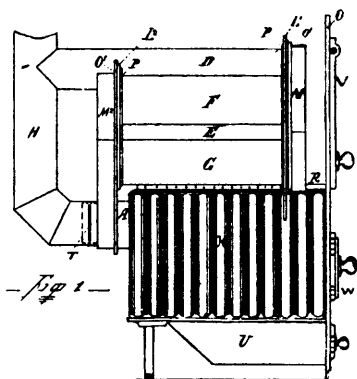
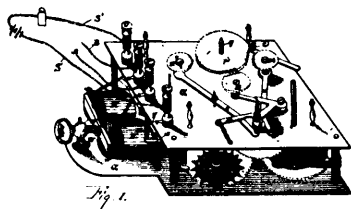


**No. 42,804. Furnace. (Fournaise.)**

William J. Copp, Hamilton, Ontario, Canada, 2nd May, 1893; 6 years

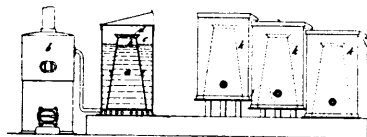
*Claim.*—1st. In a radiating furnace, the combination of the side furnace R<sup>1</sup> and R<sup>2</sup>, made in separate castings, each having an upright continuous flange on top, said flanges S<sup>1</sup> and S<sup>2</sup>, forming a cavity between them, forming a putty gas tight joint when the flanges are bolted together, as set forth. 2nd. In a radiating furnace, the combination of the end plates L<sup>1</sup> and L<sup>2</sup>, with the radiating tubes B, C, D, E, F, G, and the orifice A, and chimney H, with the damper T, in same, as set forth. 3rd. In a radiating furnace, the combination of the front end ducts M<sup>1</sup>, and the rear end ducts M<sup>2</sup>, bolted and jointed on the end plates L<sup>1</sup> and L<sup>2</sup>, as described, in connection with the radiating tubes, and the chimney H, as set forth. 4th. The metallic putty joint, shield N 2, around the radiating tubes or their equivalent to protect the putty joints with the plates L<sup>1</sup> and 2 from injury, breakages as described, all operating, substantially as and for the purposes herein set forth.

**No. 42,805. Fire Telegraphy. (Avertisseur d'incendie.)**

Sydney J. Sanford, Barrie, Ontario, Canada, 3rd May 1893; 6 years.

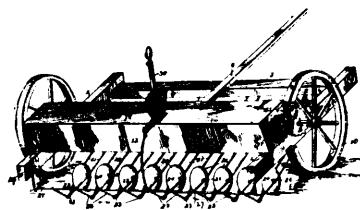
*Claim.*—1st. In fire alarm telegraphy, a street alarm box having a number wheel with a spiral thread formed on its rim from inside to outside teeth formed in the said thread, said teeth being arranged in sets to represent the digits of the number, and co-operating with a circuit breaker, substantially as specified. 2nd. In fire alarm telegraphy, a street alarm box having a number wheel with a spiral thread formed on its rim from inside to outside sets of teeth indicating the hundreds, tens and units, digits formed close together at the inner end of the thread, and designed to operate the indicating apparatus, and sets of teeth following the first at greater intervals apart designed to ring tower bell and gongs, the said teeth co-operating with a circuit breaker, for the purpose specified. 3rd. In fire alarm telegraphy, a street alarm box having a number wheel C, with a spiral thread D, formed on the rim, and teeth formed on the thread, in combination, with a weighted circuit breaker L, having an adjustable screw, M, dog n, and supplemental weighted arm N, substantially as and for the purpose specified. 4th. In a fire alarm telegraphy, a street alarm box having a number wheel C, with a spiral thread D, formed on the rim, and teeth formed on the thread, in combination, with a weighted circuit breaker L, dog n, projection Q, running in the slot q, for the purpose specified. 5th. In fire alarm telegraphy, a street alarm box having a number wheel C, with a spiral thread D, formed on the rim, and teeth formed on the thread, in combination, with a weighted circuit breaker L, dog n, projection o, on the hub m, working under the rod P, and through the notches p, the circuit breaker L, being lifted clear of the plate K, by the projection Q, rising on the boss T, and moved back to the inner end of the spindle U, by the lever R, having a weighted supplemental arm substantially as specified. 6th. In fire alarm telegraphy, a street alarm box having a number wheel C, with a spiral thread D, formed on the rim from inside to outside, sets of teeth d, indicating the hundreds, tens and units digits, formed close together at the inner end of the thread

D, and sets of teeth d, following the first on the thread D, at greater intervals apart co-operating with a circuit breaker L, and plate K, combined with a numbering apparatus provided with an electro-magnet, R<sup>1</sup> R<sup>1</sup>, lever X, fly stop o<sup>1</sup>, and escapement z, intermittently released by said lever to control the numbering discs. 7th. In fire alarm telegraphy, a street alarm box having a number wheel C, with a spiral thread D, formed on the rim from inside to outside, sets of teeth d, indicating the hundreds, tens and units digits, formed close together at the inner end of the thread D, and sets of teeth d, following the first on the thread D, at greater intervals apart co-operating with a circuit breaker L, and plate K, in combination, with the numbering discs q<sup>1</sup>, 12, 13 and 14, and levers and cams, as described, of the escapement z, spring r, chain of gearing arranged between said escapement and spring, and driven by said spring, the electro magnet R<sup>1</sup> R<sup>1</sup>, fly stop o<sup>1</sup>, and lever X, intermittently attached thereby to control said chain of gearing and numbering discs, as set forth. 8th. In fire alarm telegraphy in which a numbering apparatus, as q<sup>1</sup>, 12, 13, 14, and connections to exhibit the number of the alarm struck is employed in addition to the alarm bell mechanism, as described, arranged to operate the numbering apparatus and controlled through circuit breaker L, and plate K, and connections by a single street circuit, in combination, with bell operating mechanism provided with an independent circuit S<sup>1</sup>, connected to the numbering apparatus and controlled by the action of the mechanism of the numbering apparatus, substantially as herein specified. 9th. In fire alarm telegraphy, in which, a numbering apparatus, as q<sup>1</sup>, 12, 13, 14, and connections to exhibit the number of the alarm struck is employed in addition to the street box mechanism, weighted circuit breaker L, with dog n, and its co-operating parts, plate K, number wheel C, with thread D, and ratchets d, and the weighted pivoted rod R, operated from a single street circuit, and connected to an independent bell circuit S<sup>1</sup>, a fly stop o<sup>1</sup>, and lever X, all arranged and operated to first strike the bell once, then set the indicating numbers, and finally strike the alarm on the bell, substantially as set forth.

**No. 42,806. Art of and Apparatus for Preserving Milk. (Art et appareil de conservation du lait.)**

Joseph Oakhill and Richard H. Leaker, both of Bristol, England, 4rd May, 1893; 6 years.

*Claim.*—An improved process of preserving milk under which the milk is charged into a suitable vessel which, after having been made air tight, is subjected to the action of heat—approximately 200° Fahrenheit—sufficient to destroy or render inert the germs of decomposition in the milk, the said vessel being subsequently cooled and immersed in a cold water bath, whereby the temperature of the milk is lowered to about 32° Fahrenheit, substantially as hereinbefore described with reference to the accompanying drawings.

**No. 42,807. Seed Drill. (Semoir en ligne.)**

Elmer Barclay, Hartford, Michigan, U.S.A., 3rd May, 1893; 6 years.

*Claim.*—The combination, with the framework, comprising the front and rear bars 2 and 3, each provided with a series of pairs of depending eye bolts, the eye bolts of one bar alternating with those of the other, of the U-shaped frames terminating at their front ends in eyes loosely coupled with the eye bolts, and provided at their rear ends with eyes and at each side of the same with bearings, short bearing shafts arranged in the bearings, disc-shaped drills mounted on the shafts, the crank shaft 27, the lever for operating the same, and the short chains leading from the crank shaft to the eyes at the rear ends of the frames, substantially as specified.