

floor. On this bar are levers, one for each floor, and by pulling any one of these every window may be opened at right angles to the building. By this action a ladder, placed on the inside of each window, detaches itself and slides downwards until it reaches the window beneath, there connecting with a similar ladder fixed on the inside of every sash, thus forming a continuous ladder from the top window to the ground. This appliance can be operated in a few seconds from any floor, and the apparatus is so constructed that the windows furnished with it cannot be distinguished from the other windows of the building. This escape has the merit that it cannot be actuated from the outside, nor does it interfere with the architectural design. We feel certain that for factories and similar buildings it would be of great benefit in case of fire. The mechanism and construction are simple, and it forms a ready and safe exit in case of necessity.

The other escapes, engines, and appliances shown were of the stamp usual in the colony, and were in great variety.

On a later date, on the Vincennes Racecourse, an exhibition of methods of fire-extinction and life-saving by the firemen of the different nations was given. To assist in this demonstration a large frame building about 60 ft. high had been erected opposite the grandstand. Representative teams had to start from a point about 500 yards distant, and rescue persons and extinguish imaginary fires on the different floors. It was a very interesting competition, and showed to advantage the different styles of those competing, especially of the Portuguese and American teams. In the life-saving portion of the display the former used the ordinary section scaling-ladder, but instead of the usual method of lifting the ladders, and shipping the additional lengths from the bottom, they were attached at the top. The men quickly reached the building, and with the life-lines drew up the canvas shoot-escape, and with this and their lines soon had those to be rescued safely on the ground. They were a wonderfully well-disciplined and agile body of men. Their climbing exercises and smart work caused great enthusiasm among the large concourse present. The American team from Kansas City, under Chief Hale, gave a splendid exhibition with their steam fire-engine and pompier ladders. In the suppression of an imaginary fire they were easily first, their work being wonderfully smart throughout. Their engine, with steam up, preceded by a light hose-cart which laid out the hose at a gallop, was quickly got into position, and in a very short space of time had jets playing over the building. The hitch-up was made in under five seconds. The British representatives gave a very creditable display, the Leyton Brigade working their steamer quickly, and getting strong jets from front and rear of building. The Worthing Brigade worked their escape, but through a slight error in placing it had to shift its position, and this in the loose soil caused a little delay. When once in position, by the aid of the canvas shoot attached, they soon had the necessary number of persons on the ground. Altogether, it was a very interesting and creditable display. The American team being ruled out as a professional team, the first prize was awarded to the Portuguese, and the second to the British. The members of the Paris Brigade also gave a very interesting gymnastic display, and an exhibition of drill with their motor engine. While coming along the track it was stopped for a few seconds to extinguish small fires about one hundred yards apart. The speed with which these fires were put out and the engine got under way again showed their power and utility in a very favourable manner. At the conclusion of the above there were an inspection and march past of the firemen by President Loubet, who then presented the prizes won, and also decorations to representatives of the different nations present.

At one of the Paris fire stations we had the pleasure of attending a turn-out of the brigade. With the men on the upper floor, and coming down the sliding-pole, the automobiles were out in slightly over 11 seconds, and the horsed escape in 30 seconds. The ease and rapidity with which the former style of plant is worked is surprising. The Paris Brigade has a number of these motors in use, the power being storage electricity. They have a large trussed telescope escape which weighs over 4 tons, and this is quickly and successfully used in their work. The turning of corners and the getting into position are easily manœuvred. The electrically-propelled engine carries a tank of about 100 gallons capacity. As soon as the engine arrives at the scene of a fire the motor-power is instantly transferred to the pumps. The hose, which is provided with an internal spiral wire, is already connected and full of water, thus insuring a pressure immediately. The fireman, by opening the shut-off nozzle, has a jet at his command at once, and in this respect is the equal of the chemical engine. This engine has also a suction-pipe by which it can supply itself, or the tank can be filled from the mains. From the accumulator can also be drawn power for illuminating purposes, through arc or incandescent lamps. The electric hose-cart is capable of carrying six men with a full supply of hose, pompier ladders, &c. The accumulators for supplying the necessary energy are enclosed in cases and carried underneath the apparatus. They are calculated to allow for thirty-six miles of travelling before being exhausted. The automobiles give great satisfaction, and it is expected that, with certain improvements that have been found necessary, they will be universally adopted by the Paris Fire Department for transporting its fire-fighting appliances. There can be no question that, if the automobile can be made to stand the rough usage that may be expected in this style of work, it will be generally adopted, as it seems to be the perfection of usefulness in the matter of fire-brigade appliances. Another appliance is the smoke-exhauster. The pressure from the main is used to drive a fan, which is connected with a very light cambric rubber hose about 6 in. in diameter. This can be used to draw the smoke out of a cellar, &c., or to force in air. After this exhibition we attended their drill-ground, where squads of men were put through a number of life-saving and gymnastic exercises. These were wonderfully well done. For six months each recruit is kept in this training-school, the physical portion being a special feature. The men are also trained in the use of the fire-brigade appliances, and lectures are given on a variety of subjects, such as building construction, hydrostatics, &c., which must tend to make them better able to follow their dangerous calling.

As a whole, we consider the Congress was not the success it should have been. It was a great opportunity for exhibiting improvements in the science of fire-fighting missed. The manage-