

THE HARE AND HER FOES.

Mr. Wolf has represented in the admirable picture (which we select from his work entitled "The Life and Habits of Wild Animals,") a touching episode in the life of one of the most graceful and harmless creatures in the whole list of Nature's works. The hare (*Lepus timidus* of Linnæus) has in all ages been a chosen type of speed and timidity; and from the time of the Roman empire till now, the chasing of hares has been a favorite sport. In the pursuit of these creatures, as generally practised now, called coursing, grayhounds are employed, the dogs being matched against each other in couples, and held by their collars to a catch at the end of a leathern strap. When a hare is found, and leaves her form in the grass where she prefers to make her home, after she has started some distance, the dogs are released simultaneously; and away they go with lightning speed, the devotees of the sport riding after them to enjoy the chase, and to see which favorite dog catches the hare. The pursued creature is overmatched in speed, strength and endurance; but she frequently gives the best grayhounds a long run, as she doubles with remarkable facility, turning back on her course so suddenly as to run between the dogs, who shoot far beyond her, being unable to come to a sudden stop. Hares are also hunted in the usual way, with harriers, hounds of a breed possessing speed and keenness of scent.

The eyes of the hare are large and prominent, and its vision extends in all directions at once; its senses of hearing and smell are very acute. Hares generally remain quiet during the day in the form or seat, as it is called, which is generally a depression in the ground in a meadow. In the evening they chase each other and gambol over the fields, and manage to get food enough for the day's support; and the neutral color of the animals so closely resembles that of the soil that they readily escape observation after sunset.

The hare shown in our illustration has been wounded in the foot, perhaps by a stray pellet from a sportsman's gun; and unable to proceed farther, she crouches under a leafless bush. But the whiteness of the snow soon reveals her whereabouts to the pursuing crows; and a few of these strong omnivora will soon peck the poor creature to death. The crows depicted are of the hooded variety (*Corvus cornix*, Linnæus); they have black heads, fore-necks, wings, and tails, with purplish blue and green reflections; the rest of the plumage is ash gray in color, tinged with purple. This crow occurs in all parts of Europe, being common in the north of Scotland; its favorite food is fish and molluscs; and when unable to break the shells of the latter with its beak, it will carry them to a great height and drop them on a rocky spot. Its ordinary flight is slow and regular, and its gait upon the ground remarkably sedate and dignified.

Simple Apparatus only Necessary.

We hear so much nowadays about the elaborate outfits of scientific apparatus, wherewith this or that college is provided, while so many ingenious devices, with names ending in "graph," "scope," and "meter," are constantly being invented, that we are half inclined to think that more attention is being paid to the tools than to the work which they are designed to accomplish. Apparatus may be divided into two classes; first, that used for purposes of investigation; and second, that employed to demonstrate the laws of science or the results of investigations to others. In either case, the simpler the tools the better; for in the one the investigator wishes little to hamper him in his pathway toward the result he searches for, and in the other the idea is to impress principles on the mind, and not to burden it with unnecessary details.

The student of the lives of the great inventors and discoverers will find that they almost always preferred the most primitive devices for working out their ideas, and for illustrating their meaning in giving explanations. Faraday's first electrical experiments were conducted on a machine which he himself made with a glass phial; and his lectures to children were models of extemporaneous speaking, illustrated by experiments, made with the simplest materials. His discourses on a candle are admirable disquisitions on heat and combustion. Tyndall, from a piece of ice, evolves a wonderful story. The late Professor Graham offered in himself a still more striking example of how genius of the right sort can work with the very simplest means. A recent biographer says that, "with a glass tube and plug of plaster of Paris, Graham discovered and verified the law of diffusion of gases. With a tobacco pipe, he proved indisputably that air is a

Ingenious Advertising.

Visitors to the Centennial will doubtless remember that one of the sewing machine exhibitors in Machinery Hall, whose display occupied a very prominent position on a principal aisle, kept posted, during the continuance of the Exposition, a large sign, inviting all comers, and especially those who owned sewing machines, to inscribe their names in a handsome register. The inducement offered was that, after the close of the Exhibition an elegant sewing machine would be presented to some one of the signers, and all would have equal chances in drawing for the prize. Of course the effect of this was to attract hundreds of people toward this particular exhibitor's display; and thus his goods were brought into especial prominence. But that was merely a secondary object. A very large percentage of those who stopped to read the sign wrote their names, and told the kind of sewing machine they were using.

Then a neat certificate was presented in return, which established the signer's claim to one share in the drawing. In this way thousands—perhaps tens of thousands—of names of sewing machine users were obtained. We always found a crowd about the book, often large enough to partially block the passage.

Now that the Centennial is over, the shrewd sewing machine concern is reaping its rich reward, and at the same time is firing hot shot into its competitors. To every individual on that register circulars are sent in which each person is informed that No. 20,561 drew the prize, and that the fair winner is of course "delighted with her good fortune." Then the reader is told that to him or her, and to all other signers on the book, and to them only (there is an air of severe justice and unrelenting discrimination about this), the so-and-so machine will be sold at half price, and in addition the purchaser will be presented with a "Centennial souvenir," in the shape of a set of lithographed figures of the buildings. He is also advised: "If you have an old machine, it will be to your advantage to sell it now, and get the so-and-so." Of course, the recipient of this wise counsel is impressed with the inestimable advantages, which are his merely through his fortunately happening to sign his name during his Centennial visit.

There is a furniture dealer somewhere out West to whom it would be unfair not to give credit while on this subject of ingenious advertising. He issues circulars to all the church

sextons, requesting them to send to him, just as soon as they learn of a marriage, the names of the happy pair. On receipt of this information, the agents of the furniture man are hurled upon the innocent and defenceless couple; and on sales being effected a neat percentage goes to the sexton. The same enterprising person prints business cards across marriage licenses, and furnishes them to town clerks; and among the names of other household furniture, the words "cradles" and "children's chairs" are prominently displayed. Some years ago, there was (and probably still is) a custom in some New England towns of tombstone agents appearing at the house of mourning within a few hours after a funeral; and they would, tearfully and in a sympathetic manner, solicit an order for a memorial marble to the "dear departed." While some of the above-described methods of increasing business are perhaps objectionable, they lack the promptitude and persistency of the lightning rod man, who starts when the storm commences, and pervades the whole town before the clouds have dispersed.

A NEW plan for protecting safes is to enclose them in wire netting, so connected with a battery and bell that the division of any portion of the wire ruptures a circuit, and the bell gives the alarm.



HUNTED DOWN.

mechanical mixture of its constituent gases. With a tamboourine and a basin of water, he divided bodies into crystalloids and colloids, and obtained rock crystal and red oxide of iron soluble in water. With a child's India rubber balloon filled with carbonic acid, he separated oxygen from atmospheric air, and established points the importance of which, from a physiological point of view, it is impossible to overrate. And finally, by the expansion of a palladium wire, he did much to prove that hydrogen is a white metal."

Pressing Cotton in Vessels.

A new system has been recently adopted in this city by shippers of cotton which is said to prove thus far successful. The cotton is first pressed in a compressing machine, and bound with iron bands, as is usual with all cotton cargoes. The bales are then put into the ship, side by side, and pressed longitudinally into their places by a patent hydraulic machine. They thus get a pressure both ways, and it is this second pressure that makes the saving of room. The entire cotton cargo thus forms a compact mass in the hold, and its weight is proportionately so much greater than ordinary cotton cargoes that the necessity for ballasting the ship is obviated. It is claimed that about one-fourth more cotton can be packed in vessels' holds by this means than formerly.