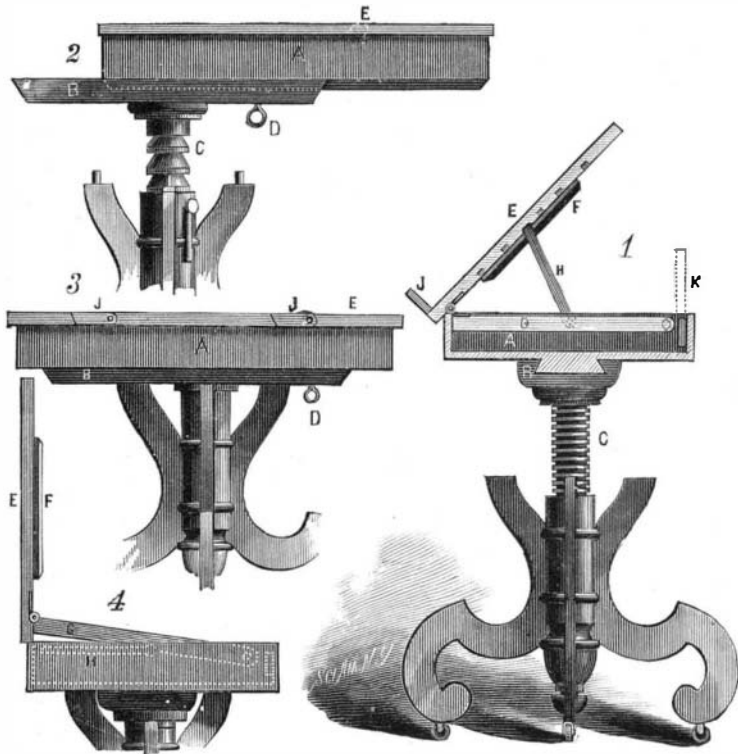


AUTOMATIC GAME COUNTER.

The annexed engravings represent a game counter that is compact, convenient, and useful for nearly all games of cards, and is especially adapted to the modern game of whist. This counter, besides scoring the points made in each game, indicates and records the aggregate number of games and points made during a series of games. It can be readily set for games of five or seven points, and it will record up to nine games and ninety-nine points inclusive. By moving the arrow or pointer in a certain manner, either the games or points can be worked independently of each other.

This counter is supposed to be set for a game of five points. Before beginning the game the arrow should be placed at 0, and the apertures in the dial should also show ciphers. To do this the arrow is turned from 6 to 7 until the aperture

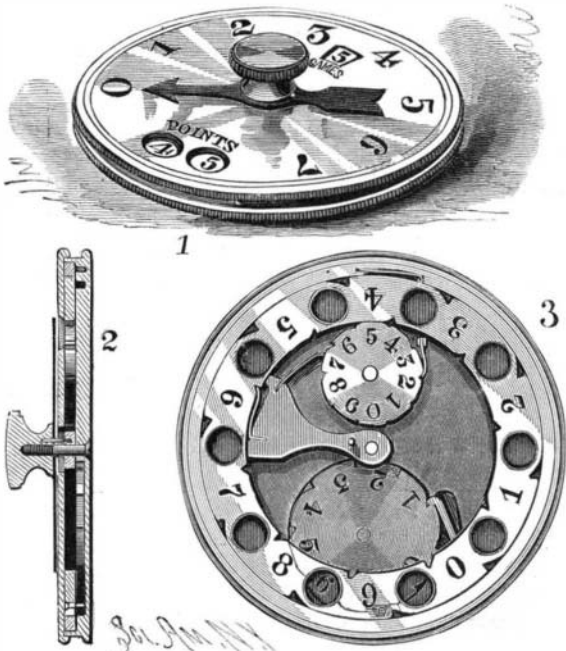


KOSSBIEL'S NOVEL TABLE.

“games” registers 0. By turning the arrow from 0 to 6, and forward and backward between those figures, ciphers will appear at the lower apertures marked “points.”

As the game progresses and points are made, the arrow is turned by the knob from left to right as the points are made up to 5. When this number is reached the figure 1 appears in the aperture marked “games,” and the figures 1 to 5 appear successively as the points have been made in the lower apertures marked “points.”

The arrow is then turned back to 0, and as the play progresses in the new game and points are made, the arrow is moved and the number of the accumulated points is registered in the lower apertures, showing the whole number of points made, whether a game has been won or lost. When the game has been won by the opponent, the arrow standing wherever it may happen to be (between 0 and 5) must be turned back to 0 before beginning the new game. If more points are made than enough to finish the game, the arrow must be turned to 5, thus scoring the game, then back to 0, and then



DAYTON'S AUTOMATIC GAME COUNTER.

forward to the number of points of surplus or laps made. If desired for clubs, etc., the counter can be made so as to register ninety-nine games and nine hundred and ninety-nine points.

The counter has been made in nickel plate, and has also been made and set in a watch case, and works in a similar manner as the one above described, the small or hour hand taking the place of the arrow, and noting the points on the

dial, the long or minute hand recording the total number of points made, and the second hand recording the games, all worked directly by the stem. The figures on the dial are in two colors, making it a very neat and attractive article. These goods are not on the market yet, but arrangements are being made to place them at a reasonable and moderate cost.

The invention has been patented by Mr. Frank Dayton, of Portland, Oregon; New York address, P. O. Box 1967

A NOVEL TABLE.

The under side of the table is formed with a central track plate which fits in a groove in a plate, B, held on the end of the spindle, C; the track plate is locked in place by the binding screw, D. The spindle passes into the top of a tubular standard supported by a suitable base of any desired shape, and can be screw threaded as shown in Fig. 1, or provided with a series of grooves forming beveled annular shoulders, in which case the standard is furnished with a spring catch (Fig. 2), the end of which projects through the standards so as to engage with the shoulders. When the spindle is formed with shoulders, the upper ends of the arms are provided with upwardly projecting pins that pass into holes in the bottom of the plate to hold the table steady and in place when lowered. The top plate, E, is hinged to the ends of two arms, G, pivoted at the opposite ends to the inner surfaces of the end pieces of the table; both longitudinal edges can thus be swung upward. The braces, H, fold into grooves in the upper edges of the end pieces of the table, and their upper ends enter apertures in the under side of the top plate. When the plate, E, and arms, G, are turned upward together on the points of the arms, they are supported in an inclined position—the reverse of that shown in Fig. 1—by the braces. A mirror, F, is secured to the under side of the top plate, to which are attached the clips, J, that fit in recesses and can be turned upward to prevent the book or paper from sliding off. The table can be adjusted vertically by means of the spindle. When it is to be used as a sick bed, it can be extended laterally by drawing the top in the direction in which it is to project, and locking it in place with the binding screw. It can thus be adjusted to project partly over a bed or sofa, so as to be very convenient for the person using it. By resting the top plate on the arm, K, it may be used as a writing desk. It may be adjusted as a toilet table by swinging the top into a vertical position.

Further particulars may be obtained by addressing the inventor, Mr. Charles Kossbiel, of Cuero, Texas.

Gas from Pinewood.

M. Combe d'Alma, member of the Agricultural Society of La Gironde, has succeeded in producing illuminating gas by the distillation of the sea pine (*Pinus maritima*). M. D'Alma was engaged at St. Nerac (Lot-et-Garonne) in the production of a special kind of macadam; and part of the process consisted in baking clay. This was effected by the aid of the pinewood found in the district, which formed excellent fuel. It occurred to M. D'Alma, however, that it would be more advantageous to employ not the wood itself, but the gas which might be produced by its distillation. He therefore at once obtained permission to conduct a number of experiments at the gas works in the town, and eventually succeeded in producing a gas with which he supplied the public and a considerable proportion of the private lights for two nights in succession.

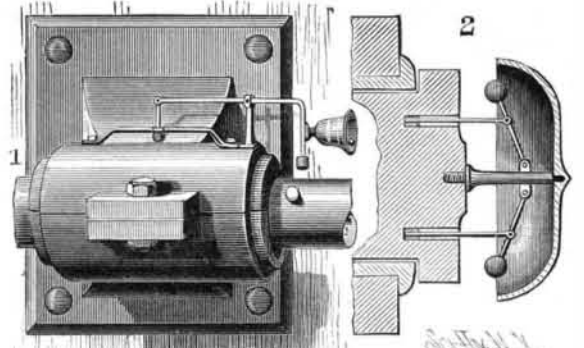
On the first night the effect was not altogether satisfactory, owing to the material used being sodden and of bad quality; but on the second occasion the lighting was entirely successful. The event caused some excitement among the municipal authorities, who appointed a commission to vouch for the success of the experiment. This they did, and have since expressed a desire that the matter may be taken up by the municipalities of those places in the southwest of France where this particular species of pinewood is to be found, with the view to its profitable utilization for gas making purposes. M. D'Alma has satisfactorily proved that the distillation of pinewood in closed vessels is thoroughly practicable; and he believes that the resulting gas could be produced at a much lower cost than that of ordinary coal gas, while the sale of the residual products (charcoal, tar, and an acid liquid) would defray the whole expenses of manufacture.

Close of Another Year.

One more number, and volume fifty-one of the SCIENTIFIC AMERICAN will close, and with it several thousand subscriptions will expire. To save the removal of such a large number from our subscription lists, and insure a continuance of the paper without interruption, subscribers will be benefited and our subscription clerks greatly relieved by the remittance of subscriptions before the year closes.

AUTOMATIC ALARM FOR BEARINGS.

The engraving shows a device for giving an alarm or signal when the bearings of shafting or parts of machinery become overheated by friction. A fusible head is attached to the end of a wire connected with a lever fulcrumed on a post fastened to the box. The outer end of the lever is bent downward to form an arm to which a bell is connected, and the end of the arm carries a foot piece which is struck by a stud on the shaft when the bearing becomes hot enough to melt the fusible head. This head is held in contact with the bearing by confinement beneath a bridge piece, through which the wire passes loosely. It is evident that when the head melts, the weight of the bell will carry the arm of the lever down to the shaft, when the stud, striking the arm, will ring the bell at every revolution.



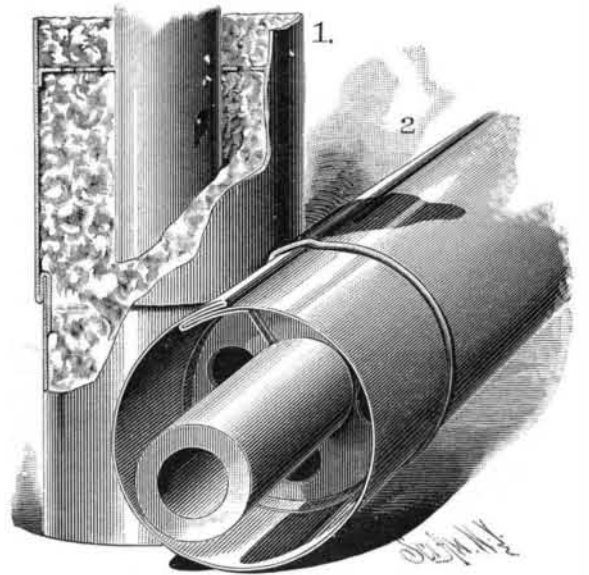
O'CONNELL'S AUTOMATIC ALARM FOR BEARINGS.

Fig. 2 shows the device applied to the crank pin bearing of an engine. The outer end of an arm carries a gong bell. The clappers are loosely connected with the arm and, by wires, with fusible plugs fitted snugly into end bores in the wrist pin. The clappers are thus held out of contact with the gong until the overheating of the bearing melts the plugs, when they are thrown outward by centrifugal force to sound the gong. This device may also be applied to give an alarm by the overheating of reciprocating or sliding surfaces.

This invention has been patented by Mr. John O'Connell, of 309 Broadway, Providence, R. I.

CASING FOR PIPES.

The engraving shows a casing for holding non-conducting material—such as mineral wool, etc.—on pipes, and which can be easily applied and fitted, and closed and locked without requiring the use of solder. A disk formed with a central opening to receive the pipe is of such size as to fit within the casing. It is cut open to permit placing it on any desired part of the pipe, and has its outer edge bent down to form a flange. A series of apertures is punched in the disk to allow the non-conducting material in the different compartments to unite by the fibers passing through. A sheet of metal from which a tube section is made has one edge creased to form a longitudinal pocket for receiving the other edge of the plate; the pocket is formed a short distance from the edge, so that when the free edge is in the pocket the edges will overlap. The joint is shown very clearly in Fig. 2. The edges of the casing sections are overlapped, and then held together by pins or nails passed through holes. The sections can thus be opened very easily to pass them around the pipe and to put in the filling material. One end edge of each section is creased to form an annular pocket to receive the adjoining edge of the next section, as shown in Fig. 1. When a pipe is to be covered, a series of disks is placed around it, a casing section is put on and secured with the



WOOD'S CASING FOR PIPES.

pins or nails. When filled with the non-conducting material, another section is placed adjoining it.

This invention has been patented by Messrs. James F. and John F. Wood, of Wilmington, Del.

ENGLISH crown soap is an imported soft soap used by harness makers and the like for rubbing and polishing leather.