over your hair. Prepare in this way all the leaf you think you will need; carefully place it in a box or basket, and you are ready to go out and lay it on. Then all you have to do is to lay your paper on the size, leaf side down, and rub it down with your fingers, then pull off the paper. Any spots not covered can be mended by holding a strip of paper over it, and pressing down with the thumb or finger. If the paper in the book is colored so it will color the hair, it is best to cut up white paper of about the same texture the size of the book, and use it instead of the paper in the book to take up the leaf on. Dont get into too much of a hurry, practice carefully, and you will get on all right. This is the best method for an amateur or new beginner, or, in fact, for anyone, on the outside when the air is stirring. Some gilders cut the binding off the book and loosen all the leaves at once, but in that way any little mishap is liable to get the book out of shape and ruin more or less of the leaf. There is a knack of taking the "kinks" out of a rumpled or turned-up leaf by a puff of the breath. The expert can do wonders in that line. The novice is apt to blow the leaf into an awful fix in his first attempts, but with practice he will find that a pretty badly-crinkled leaf can be made tolerably smooth by a soft puff from the right direction, but it must be soft, or away will go your leaf into an irredeemable crumple.

OBLIQUE ARCH.

The method of finding moulds and bevels required to complete this piece of masonry is shown in the diagram annexed. The method of setting out the work is as follows: Lay down the angle required and the arch, which divide into as many archstones as are required. Let fall the perpendicular lines from the heads of archstones. They will strike the angle line. Square out at right angles from these points, to intersect with development of arch, A A. This will give the soffit mould. At the left hand all the bevels are found in the same way. To work the quoin heads: To find twist of each course, trace down the springer lines to the radius point, also the same joint at the opposite side of arch. Where these lines meet at a point, L, take the depth of beds from this point and the difference will be the twist on the length of course. The sweep in centre is the oblique course curve running over the finished arch soffits. Take the height of arch at N N, say some length down from a line, H N, horizontal. This will give bevels to the interior joints. When applying bevels to quoin heads keep template on line shown at W in development. This method of setting out and diagram is from Mr. Alexander Thompson, Gateshead.

IRON SCREWS IN STONE WALLS.

An ingenious and simple method of fixing metal screws into stone walls has been devised. Wooden dowels, beside the tendency to weaken the walls, do not afford security and permanence. A wire of suitable thickness is coiled on the screws so as to follow the threads of the same, and to form a kind of screw nut. The coiling may commence near the head of the bolts and proceed toward the point by laying the wire into the grooves. After arriving at the point of the screw the wire may be wound backward over the helix already wound on, but with a steeper pitch so as to leave wider interstices between consecutive convolutions of the wire. This wire coil or nut is introduced into the hole formed in the wall for this purpose, being slightly wider in diameter than the outer layers of wire, after which the surrounding spaces are filled up with plaster of paris, cement, or similar binding material in a plastic condition. When the cement has become sufficiently hard the screw bolt, which has served as a core, or another screw bolt of the same diameter and pitch, may be screwed into the wire coil, or in and out repeatedly without damaging the wall, thus forming a strong and durable metal attachment.

GILDING ON GLASS.

In commencing this work you will require a drawing on paper for each design, which you will prepare as follows: Cut a thin piece of paper to the size of the glass, draw out your design correctly in black lead pencil on the paper; then prick through the outlines with a fine needle. Tie up a little dry white lead in a piece of rag; this is a pounce-bag. Now place your design upon the glass, right side up, and dust it with the pounce-bag; take the paper carefully off and the design will appear in white dots upon the glass; this is to guide you in laying on the gold on the opposite side. Now clean the glass well on the side that the gold is to go on; prepare your size in the following manner: Get some perfectly clear water, without the slightest particle of grease or other foreign matter; put it on a slow fire to boil, using and an enamelled saucepan for that purpose, and taking care the smoke does not get into it; while boiling put in two or three shreds of the very best isinglass; let it boil a few minutes, then strain it through a fine clean rag; when cool it is ready for use. The great point in glass gilding is to have the glass, the size, and everything you use perfectly clean; a touch of the finger on the glass will tarnish the gold; you must use the tip and cushion to put on the gold, laying the gold on as level as possible, as its uniform brightness depends in a great measure on that point; use a flat camel's hair tool for laying on the size; flow the size on and let it drain off when you put the gold on; when perfectly dry, take a ball of the finest cotton wool and gently rub or polish the gold; you can then lay on another coat of gold if desirable. Gilding on glass is usually done with ordinary size, and the leaf placed on the outside; but we would prefer making the size out of an isinglass that is used for such purposes, dissolving it in water. It can be had in any drug store. In using this size lay the gold on the inside of the glass, as it will look better and wear longer than when on the outside.