of God" (third from left, and detail, FIG. 18). When closed, the handles form a mirror inscription of “Ol Opener” (Ya Futah). This name for God summoned to mind a variety of divine qualities: for example, God’s capacity to open gates, solve problems, and eliminate difficulties. When the calligrapher worked the scissors, he would repeat the invocation, remembering the qualities of God, as an act of “remembrance” (T. zikr). On one extravagant pair of scissors (longest pair, in middle of FIG. 17), the inscription has been stylized into acanthus scrolls. The entire outer surface of this pair of scissors has been overlaid with the thinnest gold, after which the foliate ornamentation was built up with fine gold wires and burnished.

**Finishing Activities**

**Sand Shakers and Gold Burnishers**

Once the ink was on the paper, the calligrapher set in motion a number of finishing activities. First was the matter of dealing with excess ink. Unlike their European counterparts, Muslim calligraphers did not use blotting paper. Instead, they sprinkled special sands onto the wet ink to break up the surface, causing it to dry faster. The traditional source for the calligrapher’s sand was in the mountains near Manisa in western Anatolia. Small vessels with perforated tops, rather like salt shakers, helped distribute the sand evenly (FIG. 19). Known as “sand-holders” or “sprinklers” (T. ndan), they could also be used to hold finely powdered gold or silver that was sometimes sprinkled over wet ink on official documents. 46

To finish works of calligraphy that employed gold, the artist needed special tools to burnish the gold surface when it had dried (FIGS. 20 and 21). Because gold was precious and burnishing was a painstaking task, the tools for this purpose were highly specialized and were designed to give the calligrapher maximum control. Holding the burnishers makes this instantly clear: they taper and curve to fit the palm and fingers beautifully; they are balanced and solid, yet lightweight. Burnishing required small, precise movements of the hand; unlike the paper burnisher, the gold burnisher had to be moved in short strokes up and down and side to side.

The burnishing tip was usually fashioned of hard, polished stone, such as agate, onyx, jade, or jacinth (a form of zircon). The shape and size of the burnisher varied considerably, depending on the size of the surface to be burnished and the desired effect. Yazir recommends burnishers in four basic shapes: a flat burnisher with edges that are almost sharp; a bullet-nosed burnisher; a curving “claw” or “hawkbill” burnisher; and a pointed burnisher. The claw burnisher was used to burnish very small or depressed areas. The pointed burnishers also served for tooling the gold surface, making grooves or tiny punch marks that catch and reflect light differently than the rest of the gilded areas.

The broader type of burnishers would have sufficed to polish the gold in a work such as the Firuz Mirza’s siyeh mashq (FIG. 54). By contrast, Nur al-Din, who signed the elaborately illuminated folios in FIG. 14, needed more precise tools (to match his more refined skills).


1 a mirror
2 a variety
3 and elimi-

On one
10. On the sand
12. scissored
13. was built

1 finishing
2 in counter-

3 special
4 traditional
5 Anatolia.
6 the sand
7 could also
8 1 over wet

9 specialized tools
to 10 precious
11 specialized
12 furnishers
13, they
14 movements
15 in short

16 as agate,
17 in her varied
18 the desired
19 that are
20 the finisher; and
21 polished areas.
22 of large areas or tiny
23 in a work
24 in the
25 his more
FIGURE 19
Sand shakers, Turkey and Europe?, 1700s–1800s, fritware with overglaze and underglaze painting, with gilding; heights, from right to left: 2.4, 2, 2; 2 inches (6, 5.7, 5.1 cm).

OPPOSITE | FIGURE 20
Gold burnishers, Turkey, 1800s, tips of agate or jade; silver stems connecting tips to handles made of ivory or ebony; lengths range from 8.1 to 5.4 inches (20.6 to 13.7 cm). Turban-style finials on three handles.
Gold chisel. Irish, 18th C. Rye, Oxon. 15 in. 3.8 cm.

Gold eccentric, T-shaped, 18th C. 15 in. 3.8 cm.

Gold buckle, 18th C. 15 in. 3.8 cm.

Gold and iron knife, 18th C. 15 in. 3.8 cm.

Gold and iron knife, 18th C. 15 in. 3.8 cm.

Gold and iron knife, 18th C. 15 in. 3.8 cm.

Gold and iron knife, 18th C. 15 in. 3.8 cm.

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Gold and iron knife, 18th C. 15 in. 3.8 cm.
BORDERS

For inclusion in an album or to be mounted for wall hanging, works of calligraphy were often pasted onto cardboard and then dressed up with decorative borders. Charting regional and historical developments in border designs is a field still in need of considerable research, and is complicated by the fact that a particularly prized work of calligraphy might be remounted several times as it changed hands over the centuries. Nevertheless, from those albums of calligraphy that have escaped dismemberment, it is clear that considerable thought was often given to the decorative treatment of the borders and margins to enhance the calligraphy and to produce a harmonious presentation for two facing pages.

Gold was a particularly effective choice for border treatment; many borders have survived with arabesques, flowers, and sometimes human and animal figures painted in one or more colors of gold and sometimes silver. Floral ornament was an enduring favorite, and patterns might be painted or stenciled, depending on the skill of the artist and the cost involved. Artists from Iran, India, and the Ottoman lands made brilliant use of paper marbling. In this art, colors are floated on the surface of water that has been thickened with various mucilaginous ingredients. With combs, pens, or rods, the artist gently manipulates the floating colors to create the desired effect, and then lays a sheet of paper on top of it. The floating colors transfer to the paper, which is then dried.

Book Covers

For some two thousand years, bookbinding has proved to be an effective means of preserving texts. The nested folios were joined, usually by stitching through the fold, and the resulting codex was faced on top and bottom with coverings of hard, water-resistant materials. A further protective measure developed by Muslim bookbinders was the flap or “tongue” (A. lisan) attached to the lower cover that wrapped over the outside edge of the pages and tucked beneath the upper cover. Given the exalted place of books in Islamic culture, these functional elements were transformed by ornament into superb works of art.

Book covers in the Islamic world were usually made of leather glued over pasteboards. The tanning process was laborious and time-consuming, and because it was extremely odiferous, tanner guilds usually operated at the edges of population centers. Decorating the leather surface often involved dyeing, tooling, stamping, painting, and gilding. The bookbinder needed a variety of tools, including a marble slab, a whetstone, a paring instrument, knives, awls, shears, mallets, needles, rulers, compasses, and presses."

Only a few bookbinder’s tools are featured here (Fig. 22). The leather shears are decorated with a leafy vine that meanders around multipetaled blossoms. The paring instrument with an ivory handle has a watered steel blade with an inscriptional cartouche and a small cypress on the stem. Depending on his artistic ambitions, a bookbinder might have used a variety of punches, gouges, and stamps to impress motifs in the dampened leather surface. The ogival plaque, engraved with a swirling design of serrated leaves,
palmettes, and blossoms, is a relatively late example of stamping. Stamps of this size, and larger, allowed the artisan to impress a section of the design all at once. This stamp would have left the flowers and vines standing in relief against a sunken background. Gold was applied to leather in two main ways: it might be painted on with a fine brush after the design had been impressed; or the dampened leather could be covered with gold in the desired areas before being pressed with a hot stamp.

The earliest book cover illustrated here probably once protected a manuscript of the Qur’an, to judge from the inscription that is written in cartouches on the upper and lower covers (Fig. 23). The inscription references a well-known hadith:

The Prophet, peace be upon him, said: “He who recites the entire Qur’an in the daytime is empowered by 70,000 angels praying for him until evening. And he who recites the entire Qur’an in the nighttime will be empowered by 70,000 angels praying for him until morning. The Qur’an comes on the Day of Judgment as an obedient intercessor and a verifier. Whoever puts [the Qur’an] in front of himself will be granted Paradise. And whoever puts it behind himself will be led to Fire.”
This elaborate bookbinding is luxurious in appearance and spirited in decoration. It was probably made in Iran in the early 1600s. Its overall aesthetic and decorative motifs, as well as the tools and techniques used to create it, were in wide circulation in the eastern Islamic lands from the 1500s through the 1700s. With stamps and blocks, the binder has elaborated the surface into leather and gilt-leather sections and multiple levels of relief; the brown leather represents the upper level, and the ground against which the calligraphy has been written represents the lowest level. To create the lowest level, the binder first had to carve the shapes of the inscription cartouches into the pasteboard before the leather was glued over it.

The central field, covered entirely in gold, swirls with an energetic yet delicate arabesque. Rising above the sunken background is a heterogeneous mix of lotus and pomegranate palmettes, open-jawed leaves, myriad cloud bands, and florets. The complexity of the field is clarified through the raised outlines of a central ogival medallion with pendants and four quarter medallions in the corners; and the teeming decoration is controlled through strict symmetry. The composition of the central field appears to be quadrilaterally symmetrical, but close examination reveals that along the vertical axis the motifs do not create a perfect mirror repeat. This design of controlled exuberance has instead been created by using a single stamp twice, creating a mirror repeat along a horizontal axis.

The exterior covers of the Ottoman bookbinding made for a Qur’an dated 1886–87 follow the same format seen in the Persian binding—a field with a central medallion and corner medallions surrounded by decorative borders—but they achieve a strikingly different effect (fig. 24). Here the Ottoman binder has employed a limited repertoire of motifs, colors, and textures to create stately, elegant covers. The gold arabesque, composed only of split leaves and occasional punched dots, is corralled into medallions and channeled into the border. Large expanses of undecorated maroon leather surround the busy ornament in the medallions and contrast with the green background of the border. The beautiful grain of the leather and the perfect harmony of the maroon and deep green testify to the skills of the Ottoman tanners, who were famous for the range of colors they could produce in leather. The formal quality of the Ottoman book cover is enlivened by the treatment of the gold. The gold used for the arabesque and for the outlines of the medallions sparkles like running water because it has been minutely tooled with a network of fine parallel lines. In contrast, the gold that fills the guard stripes is perfectly smooth and is burnished to a low gloss.

More vibrant than the exterior covers or the slipcover are the doublures, which are made of bright green leather with a pale gold lattice of stepped ogives and punched dots. This manuscript was further protected by being enclosed within a slipcase that was decorated in the same fashion as the exterior covers of the binding. The production of slipcases signals the influence of European bookbinding traditions.

The colorful floral images in figs. 25 and 26 represent a relatively late departure from the centuries-old tradition of covering books in leather bindings. The innovation